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14. ABSTRACT

During the course of the past five years, there has been exponential growth in the use of Information and Communications Technology (ICT) and in the development of new ways to share information online. The CIR's distance education programs aimed at providing training to rehabilitation service providers in areas recovering from conflict have always relied on a blended approach, combining online delivery with hands-on workshops. By delivering training online, a wider audience can be reached while ensuring cost-effectiveness. In addition to the CIR's training modules for rehabilitation service providers, virtual Communities of Practice (vCoPs) and the development of Open Content have been fostered within a Knowledge Management platform. Through these vCoPs and online social networking tools, it has been possible for the CIR to facilitate educational and capacity-building activities by organizing the telemedicine constituency online, while simultaneously providing access to medical knowledge and necessary training to healthcare providers in remote or underserved areas.

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Glossary

ADL: Advanced Distributed Learning
AMA: American Medical Association
BiH: Bosnia and Herzegovina
CIR: Center for International Rehabilitation
CMS: Chicago Medical Society
CoPs: Communities of Practice
CRPD: Convention on the Rights of People with Disabilities
FELP-AA: A non-governmental organization based in Nairobi, Kenya committed to developing and maintaining a network of Public Health epidemiologists and laboratory scientists who have graduated from the Field Epidemiology Training Program (FELTP)
GUI: Graphical User Interface
GIS: Global Implementation Solutions - a non-profit organization which assists local and international healthcare partners and clients with coordinating, implementing and monitoring their healthcare activities.
iCons in Medicine: program incorporating a number of tools to allow healthcare providers to connect online
iConsult: teleconsultation program that connects healthcare providers in remote or medically underserved areas with a network of committed specialty physicians
IDEAnet: International Disability Educational Alliance
IDRM: International Disability Rights Monitor
IMSA: Iraqi Medical Sciences Association
ISPO: International Society for Prosthetics and Orthotics
iRC: iCon Resource Center
iTAB: iCons Tele-consultation Advisory Board
ITF: International Trust Fund for Demining and Mine Victims Assistance
KM: Knowledge Management
MOU: Memorandum of Understanding
NAAMA: National Arab American Medical Association
NGOs: non-governmental organizations
NUPOC: Northwestern University Prosthetic and Orthotic Center
OCs: online communities
OERs: Open Educational Resources
P&O: prosthetics and orthotics
PT: physical therapists/physiotherapists
SCORM: Shareable Content Object Reference Model
SN: social networking
UKC: University Klinical Center
VCoPs: Virtual Communities of Practice
WBCL: Web-Based Collaborative Learning

Introduction

The contractor for the International Disability Educational Alliance (IDEAnet) is the Center for International Rehabilitation (CIR). William K. Smith, MD, is the Principal Investigator. The mission of IDEAnet is to foster collaborative efforts to use distributed learning and telemedicine to address health disparities and foster effective, sustainable health and rehabilitation services internationally. These aims were accomplished through the innovative use of Information and Communications Technologies (ICT), computer-based training, state-of-the-art engineering projects, capacity-building education programs, interactive online tools, and advocacy on disability rights.

Initially, the CIR focused primarily on research and design related to the organizational structure and the development of technical tools to allow for the transition of the e-learning program from a hub-and-spoke model of educational content development and delivery that characterized the CIR's first five years of outreach to a Community of Practice (CoP) model of knowledge management. With assistance from an advisory board, the CIR conceptualized a virtual framework to encompass the interests and activities of three distinct but complementary communities: Rehabilitation Services, Disability Rights, and Clinical Services. The CIR then defined the dynamics of how, technically and culturally, such communities might be effectively brought together online, followed by the application of this research in the construction of the IDEAnet website and the facilitation of its online communities. These efforts began to show results through the initial contributions of projects in the areas of Open Content Development, Train-the-Trainer, Disability Rights, and Rehabilitation Engineering.

As the CIR continued its work to develop a global pedagogical model as a framework to guide the cost-effective development and delivery of blended Advanced Distributed Learning (ADL), the network was refined and divided into two topically-based CoPs: the Rehabilitation Services Community and the Telemedicine Resource Center which incorporated the development of an effective, web-based Knowledge Management platform to facilitate virtual Communities of Practice (vCoPs), including a medical volunteer medical network, Open Content development, Information Services, Social Networking, and effective program evaluation.

Body

A. Research (R) and Development (D) of Pedagogical Model, Virtual Community of Practice and Medical Volunteer Network (iCon).

R1: Research and evaluate the existing empirical literature an theoretical/conceptual models for social design strategies and relevant technologies for building effective Virtual Communities of Practice in a cross-cultural, disability-related, poly-linguistic setting.

As noted during previous reporting periods, during the past several years there has been a paradigm shift from Virtual Communities of Practice (VCoPs) to Online Communities (OCs) and Social Networking (SN) websites. Though not identical, these concepts have strong overlapping themes and many of their associated structural elements are markedly similar. Both VCoPs and OCs focus on the development of a strong network of individuals among whom information and knowledge can be shared. Traditionally the term "Communities of Practice" (CoP) has been applied to "groups of people informally bound together by shared expertise and passion for a joint enterprise."[1] Members of these communities are encouraged to "share their experiences and knowledge in free-flowing, creative ways that foster new approaches to problems"[2] and the groups are formed with the primary goal of "reflect[ing] the members' own understanding of what is important."[3] Many multinational organizations employ CoPs, though there is variation in the naming conventions used. In spite of these differences in naming, CoPs, both virtual and otherwise, and Online Communities strive to connect disparate groups of individuals or practitioners and allow them to take responsibility of a domain of knowledge.

The success of VCoPs and OCs depends on contributions from the membership, and ensuring that members "take responsibility for information-sharing and problem solving."[4] According to Gongla and Rizzuto, successful OCs are those which "do not just serve the user but also *involve* the user,"[5] and in doing so, foster the "exchange of ideas with other individuals who have experience and skill related to the same area of work."[6] To ensure the success of a social network of any type, experts indicate that individuals must be encouraged to establish personal connections with one another[7] rather than basing their interactions solely on their occupation. Recent research shows that individuals within an online community feel moved to share information that evokes emotion or which they find particularly novel and interesting, and according to Jonah Berger, author of a recent

[1] Wenger, Etienne C. and Snyder, William M. (2000). Communities of Practice: The Organizational Frontier. *Harvard Business Review.* January-February 2000: 139-145.
[2] Gongla, P. and Rizzuto, C.R. (2001). Evolving communities of practice: IBM Global Services experience. *IBM Systems Journal*. 40(4): 842-862.
[3] Wenger as per Gongla, P. and Rizzuto, C.R. (2001). Evolving communities of practice: IBM Global Services experience. *IBM Systems Journal*. 40(4): 842-862.
[4] Yang, Shih-Hsien (2009). Using Blogs to Enhance Critical Reflection and Community of Practice. *Educational Technology & Society*, 12(2): 11-21.
[5] Hannay, 2007 per McGee, James B. and Begg, Michael (2008). What medical educators need to know about "Web 2.0" *Medical Teacher*. 30: 164-169.
[6] Gongla and Rizzuto (2001).
[7] Ibid.

study on the subject, "People's behavior is heavily influenced by what others say and do."[8] Encouraging the active participation of members within an online community can be difficult, as studies indicate that "'lurking' is the 'norm' and only a few members [within a community] post regularly"[9], steps can be taken to advance the discussion among members. The creation of a shared history among users, and ensuring a means of welcoming new users and that users see value in their participation can help to help to increase involvement.[10] [11] Membership and program updates and active networking tools can be utilized to encourage members of a group or OC to share information that may be of interest to other members of the community.

In addition, awareness-raising activities, including the use of e-newsletters and external websites such as social networking sites, [12] can help to encourage new members to join a community. These tools also provide credibility and increased value to the materials and information shared within the community. By building on existing connections with key partners and interested parties, collaboration between members can be fostered, and "trust management, accountability, and quality control" of the materials and information within the OC can be ensured.[13] Central to ensuring that materials within an OC are of value is establishing a system of validating and verifying member credentials.[14] While a situation in which membership in an OC could be unrestricted is ideal, ensuring that individuals are part of a specific profession or group makes it possible to limit or eliminate issues such as abuse or distribution of inappropriate content.[15]

The use of chats, video sharing, and other "Web 2.0" [16] tools and capabilities within an online networking website allows members to create information and share it with their peers, as well as connecting to one another based on shared goals and interests. The "user-focused" approach to design and functionality of these types of materials allows for the development of content by and collaboration between members in a community.[17] In

[8] *MedicalXpress.* "Why do we share stories, news and information with others?" Updated June 29, 2011. Accessed online: 9/16/2011 - http://medicalxpress.com/news/2011-06-stories-news.html

[9] Sutton, 2001; Preece, Nonnecke and Andrews, 2004 per Riverin, Suzanne and Stacey, Elizabeth (2008). Sustaining and Online Community of Practice: A Case Study. *Journal of Distance Education*, 22(2): 43-58.

[10] Gray (2004) per Riverin and Stacey (2008)

[11] Gongla and Rizzuto (2001) note the importance of shared experiences and common tacit knowledge.

[12] These include Facebook (rank 15, 40 million users), and sites such as Wordpress (blogging; rank 29, 26 million users), Twitter (microblogging), YouTube (video sharing; rank 6, 73 million users), others.
Ranking and user data per Fuchs, Christian (2010). Social Software and Web 2.0: Their Sociological Foundations and Implications. In *Handbook of Research on Web 2.0, 3.0, and X.0: Technologies, Business, and Social Applications.* Volume II, ed. San Murugesan, 769-789. Hershey, PA: IGI-Global. Pp. 764-789. Figures provided differ from other sources, including McGee and Begg (2008) and Breen (2008).

[13] Eysenbach MD MPH, Gunther (2008). Medicine 2.0: Social Networking, Collaboration, Participation, Apomediation, and Openness. *Journal of Medical Internet Research.* July-September; 10(3): e22.

[14] Kamel Boulous, Maged N. and Wheeler, Steve (2007). The emerging Web 2.0 social software: an enabling suite of sociable technologies in health and health care education. *Health Information and Libraries Journal*, 24: 2-23.

[15] McGee, James B. and Begg, Michael (2008). What medical educators need to know about "Web 2.0." *Medical Teacher*. 30: 164-169.

[16] As reported previously, Web 2.0 views the Internet as a result of the creation of its users, and tasks the user with creating, updating, and changing the content and trends of how the web, technology, and web design are used to enhance creativity, communications, secure information sharing, collaboration and functionality. Common "Web 2.0 tools" include blogs, vlogs, Wikis, RSS feeds, photo and video sharing, web forums, instant messaging, and chats.

[17] O'Reilly, 2005 per McGee, James B. and Begg, Michael (2008). What medical educators need to know about "Web 2.0." *Medical Teacher*, 30: 164-196.

addition to their usefulness as stand-alone tools, these technologies have led to the development of new platforms that allow users to communication, collaborate, and share knowledge online.[18]

Reports indicate that approximately 1.8 billion people worldwide now use the Internet,[19] but, though Internet availability and use has grown quickly over the past decade, Internet penetration in developing countries continues to lag behind other regions.[20] According to recent statistics, 66 out of every 100 individuals in the developed world have access to the Internet, compared with 18 out of every 100 in the developing world.[21] Similar disparities are also seen within nations between rural and urban areas. Even in the United States, and the U.S. Department of Agriculture reports that 72.6 percent of urban Americans have access to the Internet, compared with 63.3 percent of rural residents.[22] While there is variation in availability of Internet service, an estimated 80 percent of active Internet users have a virtual presence,[23] and the use of social networking sites continues to increase. According to Forrester Research, the use of SN sites by individuals aged 35 to 54 increased by 60 percent in 2008,[24] and additional reports show that websites focused on user-generated content including continue to gain in popularity.[25]

Though not their intended use, reports indicate that 61 percent of Americans have used SN websites or other online resources to find health information.[26] According to a recent study, 12 percent of the 240 parents or caretakers who participated reported consulting the Internet for health-related information at least once within 24 hours of bringing a child to the emergency room.[27] In addition to the proliferation of this material online, reports from the London School of Economics indicate that it is now becoming increasingly accessible as smartphones, and tablet and personal computers become more

[18] Ferdig, R.E.; Coutts, J.; DiPietro, J.; Lok, B.; and Davis, N. (2007). Innovative technologies for multicultural education needs. *Multicultural Education & Technology Journal.* 1(1): 47.
[19] UN News Centre. "Internet can help reach anti-poverty goals, UN official tells governance forum." *UN News Centre*. Updated: September 14, 2010. Accessed online: 9/14/2011 - http://www.un.org/apps/news/story.asp?NewsID=35918&Cr=internet&Cr1=development
[20] USAID and K4Health. "Summary Report of the K4Health Environment Scan: Findings and Implications." Updated October 2009. Accessed online: 9/16/2011 - http://www.k4health.org/system/files/K4Health%20Environment%20Scan.pdf
[21] *IIFL.* "Global disparity of Internet access highlights urgent need for informed policymaking." Updated September 17, 2010. Accessed online: 9/16/2011 - http://www.indiainfoline.com/Markets/News/Global-disparity-in-Internet-access-highlights-urgent-need-for-informed-policymaking/4934024326
[22] Stenberg, Peter and Low, Sarah. "Rural Broadband at a Glance." *USAID Economic Research Service.* Updated February 2009. Accessed online: 9/16/2011 - http://www.ers.usda.gov/Publications/EIB47/
[23] Bronack, S.; Cheney, A.; Tashner, J.; Sanders, R.; and Matzen, N. (2009). Presence Pedagogy: Building Communities of Practice in Virtual Worlds. *Appalachian State University, Reich College of Education.* Available online: http://www.slideshare.net/awcheney/cider
[24] Wortham, Jenna. "Baby Boomers, Luddites? Not So Fast." *The New York Times*. Updated: February 20, 2009. Accessed online 9/14/2011 - http://bits.blogs.nytimes.com/2009/02/20/baby-boomers-luddites-not-so-fast/
[25] Breen, Kerri. "Wake up, social media users, we're crushing our creation." *CBC News*. Updated: April 28, 2009. Accessed online 9/14/2011 - http://www.cbc.ca/canada/story/2009/04/27/f-vp-breen.html
[26] Pew Research Center. "61% of American adults look online for health information." *Pew Internet*. Updated: June 11, 2009. Accessed online: 9/14/2011- http://www.pewinternet.org/Press-Releases/2009/The-Social-Life-of-Health-Information.aspx
[27] *Lowry, Fran.* "Parents turn to the Internet before going to the ER." *Reuters Online*. Updated: October 20, 2011. Accessed online 10/25/11 - http://www.reuters.com/article/2011/10/20/us-parents-er-idUSTRE79J7VF20111020

common.[28] It is important to note that as when verifying the identity of a member of an OC, the sources of information posted online, particularly information that is available to the general public must be validated and tested for accuracy.[29] Without verification of an individual's credentials, experts note that there is a "risk of dissemination of incorrect information," which in the case of health-related information is particularly problematic.[30]

In addition to the general public, healthcare providers and health-related organizations are among those creating and accessing information online. A recent study on the use of YouTube to provide information about CPR techniques found that SN websites have such a massive reach that "professional groups could make more use of them to boost public awareness."[31] Dr. Joseph Kvedar, the Director of the Center for Connected Health, has also noted the possible applications of SN websites, noting Twitter in particular as "a method of mass communication" that is real-time and "designed for mobility."[32] [33] The acceptance of Twitter among medical associations and organizations as a tool to share information with interested parties and their membership is also well documented. In addition to these "traditional" uses, clinical nurse Phil Baumann has identified a number of additional uses of the "micro blogging" site,[34] [35] which include sharing information following natural or man-made disasters, diagnostic brainstorming, disease tracking and resource connection, and drug safety alerts. The use of Twitter by international aid organizations and other groups following the earthquakes in Haiti and Japan[36] recent disease outbreaks[37] have proven successful and have laid the groundwork for similar applications of the resource in the future.

As noted by Dr. Pauline Chen, for some physicians the use of Facebook and Twitter presents the question of whether this type of interaction with patients helps or hinders the doctor-patient relationship.[38] This concern is echoed by other physicians as well, and frequently leads to the creation of both public and private online personas. In addition to physicians, medical trainees are among those in the medical profession who are most

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[28] *Reuters Online*. "Online health info popular but often unchecked." Updated: January 4, 2011. Accessed online 9/14/2011. http://www.reuters.com/article/idUSTRE7031JL20110104

[29] *Reuters Online*. "Online health info popular but often unchecked." Updated: January 4, 2011. Accessed online 9/14/2011. http://www.reuters.com/article/idUSTRE7031JL20110104

[30] Norton, Amy. "Be wary of CPR lessons on YouTube: study." *Reuters Online.* Updated: January 5, 2011. Accessed online 9/14/2011. http://www.reuters.com/article/idUSTRE70449120110105

[31] Norton, Amy. *Reuters,* January 5, 2011.

[32] Cimpanu, Catalin. "Twitter Embraced by the Medical Community." *Softpedia*. Updated: August 25, 2009. Accessed online 9/14/2011. http://news.softpedia.com/news/Twitter-Embraced-by-the-US-Medical-Community-120041.shtml

[33] Scott, Katie. "How Twitter helps doctors do their jobs." *Wired UK*. Updated: August 26, 2009. Accessed online 9/14/2011. http://www.wired.co.uk/news/archive/2009-08/26/how-twitter-helps-doctors-do-their-jobs-.aspx

[34] *USAToday, Science Fair*. "Doctors: A Tweet a day keeps the patients informed." Updated: August 24, 2009. Accessed online 9/14/2011. http://content.usatoday.com/communities/sciencefair/post/2009/08/68497630/1

[35] Baumann, Phil. "140 Health care Uses for Twitter." Updated: January 16, 2009. Accessed online 9/14/2011. http://philbaumann.com/2009/01/16/140-health-care-uses-for-twitter/

[36] Wallop, Harry. "Japan earthquake: how Twitter and Facebook helped." *The Telegraph.* Updated: March 13, 2011. Accessed online 9/14/2011. http://www.telegraph.co.uk/technology/twitter/8379101/Japan-earthquake-how-Twitter-and-Facebook-helped.html

[37] Mims, Christopher. "How Twitter Could Better Predict Disease Outbreaks." *Technology Review.* Updated July 14, 2010. Accessed online 9/14/2011 - http://www.technologyreview.com/blog/mimssbits/25480/

[38] Chen, Pauline W. "Medicine in the Age of Twitter." *The New York Times*. Updated: June 11, 2009. Accessed online 9/14/2011. http://www.nytimes.com/2009/06/11/health/11chen.html

frequently using SN we bsites, and reports indicate that 44.5 percent of the m have a Facebook account.[39] While the pe rspective that these individuals m ay be able to contribute to a discussion on a particular topic m ay inform the larger group as their opinion may differ from the "norm," Thom pson, et al.[40] note tha t matters of medical professionalism and patient privacy are freq uently concerns with re gard to m edical trainees using SN websites. Despite these pos sible issues and concerns regarding the use of SN websites, Kamel Boulos and Wheeler note that the inclusion of Web 2.0 tools can help to humanize a website, and provide a "gre ater sense of community in a potentia lly 'cold' social environm ent."[41] Further, these tools can accele rate the learning process by allowing not only inform ation to be shared, but "even m ulti-media clinical elem ents"[42] and are pa rticularly valuable f or clinicians who m ay be "isolate d from typical urban clinical centres [sic] of excellence, in remote and rural areas."[43]

The CIR has been able to increase awaren ess about IDEAnet program s and encourage participation and user involve ment. YouTube channels have been created for both the International Disability Rights Mon itor (IDRM) and the iC ons in Medicine program s,[44] and videos related to the activities of each program have been posted. Materials related to the programs have also been the program s have also been posted within Groups and Fan Pages on Facebook an d Twitter.[45] E-newsletters[46] sent to iCons in Medicine m embers and bi-weekly blog posts[47] cover a range of global health and health IT topics. The use of these tools have helped to encourage new traffic to the IDEAnet websites and increased interest in the programs.

R2: Research into issues of importance in the areas of Knowledge Management and Communities of Practice.

A shift in the field of Knowledge Managem ent (KM) has been observed. Where previous models emphasize more centralized devel opment of knowledge, newer models focus on the generation of content by users for the larg er user group. This dovetails with the shift to a social networking-based fram ework that has grown increasi ngly common, as OCs and SN websites allow users to enga ge in "cross orga nizational sharing"[48] and

[39] Thompson MD MS, Lindsay, A.; Dawson PhD, Kara; Ferdig PhD, Richard; Black MA, Erik W.; Boyer Med, J.; Coutts Med, Jade; and Black MD, Nicole Paradise (2008). The Intersection of Online Social Networking with Medical Professionalism. *Journal of General Internal Medicine.* July; 23(7): 954-957.
[40] Ibid.
[41] Kamel Boulous, Maged N. and Wheeler, Steve (2007).
[42] Ibid.
[43] Ibid.
[44] http://www.youtube.com/user/IconsinMedicine and http://www.youtube.com/user/TheIDRM respectively
[45] http://twitter.com/iCons_in_Med and http://twitter.com/The_IDRM
[46] Archive of past "iConnection" e-newsletters is available online: http://archive.constantcontact.com/fs033/1102482325007/archive/1102518353612.html
[47] Information on a range of topics is posted on a blog on Wordpress (http://iconsinmedicine.wordpress.com), Blogger (http://iconsinmedicine.blogspot.com/), and Tumblr (http://iconsinmedicine.tumblr.com/). Similar accounts have been created for the IDRM (see the "Socialize" tab of http://card.ly/The_IDRM for more information).
[48] Wilensky, H.; Su, N. Makoto; Redmiles, D.; and Mark, G. (2008). *A Community of Knowledge Management Practioners: Mirroring Power across Social Worlds*, in IFIP International Federation for Information Processing, Volume 270; *Knowledge Management in Action*, Mark Ackerman, Rose Dieng-Kuntz, Carla Simone, Volker Wulf; (Boston: Springer), pp. 195-207.

encourages disparate groups to interact with one another to share and use knowledge.[49] Liaw, et al. note that SN websites allow individuals to "acquire and share experience or knowledge,"[50] and that participants in OCs focused on KM are likely to wish to contribute to the knowledge base. These contributions can take a number of forms, including text, images, and videos, and the number of websites that allow for sharing of various types - and the popularity of these sites -continues to grow (see Table 1).

Website	URL	Ranking [51]	Instructional	Materials for	Social Networking	Video Sharing	Photo Sharing	Blogging	Micro Blogging
Blogger	www.blogger.com	5							
Facebook	www.facebook.com	2							
Flickr	www.flickr.com	32							
Instructables	www.instructables.com	1,209							
Tumblr	www.tumblr.com	46							
Twitter	www.twitter.com	9							
VodPod	www.vodpod.com	5,587							
WordPress	www.wordpress.com	18							
YouTube	www.youtube.com	3							

Table 1: Information regarding the external social networking websites selected to disseminate information about IDEAnet programs. Shades of gray are used to show the availability of each dissemination method allowed on the site – darker gray tones denote websites that are more applicable for this type of activity, the darkest being those for which the website is most applicable.

Gongla and Rizzuto note the importance of ensuring that participants in a KM network are aware of the scope and membership of the community.[54] In addition, Liaw, et al. note that the network within an online community must not only aim to absorb information, but to "connect their previous knowledge to their newly acquired information."[55] By ensuring that KM network participants have a clear idea of their place within the larger

[49] Ibid.
[50] Liaw, Shu-Sheng; Chen, Gwo-Dong; Huang, Hsiu-Mei (2008). Users' attitudes toward Web-based collaborative learning systems for knowledge management. *Computers and Education*, 50: 950-961.
[51] "Ranking" is as per Alexa (http://www.alexa.com/). Sites are ranked according to: users worldwide, page views, minutes per visit, and other factors.
[52] "Instructional Information" is used here to denote the provision of information related to how to participate in IDEAnet programs, and background information.
[53] "Materials for Download" is used here to denote materials that will be provided for download and use by interested parties. The materials may include: written/pictorial instructions, articles, videos, images, and other materials.
[54] Gongla and Rizzuto (2001).
[55] Liaw, et al. (2008)

community, the likelihood that they will share information that is of interest to them and the broader group increases and all participants are able to benefit from the shared information.[56] As noted previously, experts underscore the importance of members of an OC being "'real' and trustworthy," as these qualities are likely to accelerate the exchange of information.[57] The inclusion of SN opportunities within a KM network, including the opportunity to create personal and/or organizational profiles, also encourages participation, as individuals within the network are able to become more familiar with one another and more willing to contribute to the group.

Experts note that more successful KM-based OCs allow ample opportunities for participants to interact with one another directly, as well as to "distribute, disseminate, exchange and share information in different multimedia formats such as voice, movie, and peer-to-peer, or to a group."[58] Using the Web 2.0 tools noted previously, this type of communication can be achieved, both within the OC and on external SN websites. The structure of social networks and social interaction is also integral to the success of KM networks. Both strong ties, characterized by common norms, and weak ties, often noted as the "holes" between these norms, between individuals are needed.[59] Level of intimacy, amount of reciprocation among users and within user groups, and a number of other factors dictate the strength of the ties within a network.[60] Groups of individuals with overlapping bases of knowledge and experience are likely to have strong social ties to one another, and thus information that they can provide to a network may be less diverse.[61] Findings of a study by Damon Centola, assistant professor of system dynamics and economic sociology at the MIT Sloan School of Management, indicate that though networks with only strong ties may be viewed as redundant, "people need to hear a new idea multiple times before making a change" and so the repetition produced by strong ties may be beneficial.[62]

Weak ties, in contrast to strong ties which are likely to promote the transfer of tacit knowledge, are central to the development of a successful KM network. These weak ties represent a perspective that is outside of the shared norms of the majority of the members of the network, and experts note the importance of these "loosely structured" portions of the network.[63] Bouty further explains that the initial interaction between individuals with weak social ties to one another may be approached cautiously, however once the involved

[56] King, William R. and Marks Jr., Peter V. (2008). Motivating knowledge sharing through a knowledge management system. *Omega*, 36: 131-146.
[57] He, Wei; Qiao, Qian; and Wei, Kwok-Kee (2009). Social relationship and its role in knowledge management systems usage. *Information & Management*, 46: 175-180.
[58] Lau, Adela and Tsui, Eric (2009). Knowledge management perspective on e-learning effectiveness. *Knowledge-Based Systems*, 22: 324-325.
[59] Granovetter, Mark (1983). The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory*, 1: 201-233.
[60] Granovetter (1983) as per Harmaakorpi, Vesa and Mutanen, Arto (2008). Knowledge Production in Networked Practice-based Innovation Processes – Interrogative Model as a Methodological Approach. *Interdisciplinary Journal of Information, Knowledge, and Management*, 3: 88-101.
[61] McFadyen, M. Ann; Semadeni, Matthew; and Cannella Jr., Albert A. (2009). Value of Strong Ties to Disconnected Others: Examining Knowledge Creation in Biomedicine. *Organization Science*. 20(3), May-June; 552-564.
[62] Dizikes, Peter. "Better health through social networking." *MIT News*. Updated September 3, 2010. Accessed Online 9/15/2011 - http://web.mit.edu/newsoffice/2010/social-networks-health-0903.html
[63] Thomas, J.C.; Kellogg, W.A.; Erickson, T. "The knowledge management puzzle: Human and social factors in knowledge management." *IBM Systems Journal*. 40(4): 863-884.

parties have found the interacti on to be m utually beneficial, they are likely to repeat the interaction.[64]

Though a "base of understanding" can be established through strong ties among participants, without divergence and differen ce of opinion new ideas ar e less likely to be generated, shared, or im plemented within the network. Variation am ong the participants in an OC - due to life experiences, geography, linguistic or cultural differences, or other factors – can contribute to the growth of a KM network. Discussion am ong members of a network on a given topic and gaining an unde rstanding of the differences between those members can help to foster an open an d effective exchange of knowledge and information.[65]

R3: Pilot study of International Consultants in Medicine (iCon) in various geographically regions.

In 2006 preparations were m ade to conduct a pilot study for the "iCon" telem edicine program, which is now called "iConsult". Th e program was designed to allow specialty physicians to volunteer to provide teleconsulta tions to healthcare prof essionals in remote and medically underserved areas worldwide. Following the success of the pilot, the integration of iConsult into a large r website – "iCons in Medicine" was planned. This new website would serve as a place to exch ange information and knowledge with other specialty physicians and form virtual Communities of Practice. Prior to the pilot, iConsult was further refined to enhance the functional ity, usability, and overa ll aesthetics of the system. User manuals were updated to reflec t these changes, and consultants reviewed the system to ensure HIPAA com pliance. To determine the most appropriate site for the pilot study, the CIR worked with the Free Pe ople's Clinic of Englewood, Access clin ics, and Mt. Sinai Hospital. It was initially decided the pilot would take place at Mt. Sinai and study protocol, data collection forms, and an Institutional Review Board submission were completed.

In September 2007, IRB approval was granted, as it was determ ined that the pilot study (beta test) for iConsult did not involve resear ch activities, as it was not a syste matic investigation designed to develop or cont ribute to generalizable knowledge. Due to management changes at Mt. Sinai, the pilot did not take place there as originally planned. Instead, after receiving IRB approval, two beta tests were co nducted, one internally and one externally, in preparation for the official launch of iCons in Medicine in June 2008. The first beta test was an internal test, comprised of CIR staff who were unfamiliar with the program. The beta focused on registrati on and consulting functions. The second was an external test involving actua l physicians (based in the U.S. and Bosnia) acting as Requestors and Volunteers in a controlled teleconsultation environment. These studies resulted in positiv e feedback that did not call for major changes to the sys tem, but identified follow-up items.

[64] Bouty (2000), as per McFadyen et al.
[65] The importance of "openness to new ideas and perspectives" within a KM network is noted in Orzano, John A.; McInerney, Claire R.; Scharf, Davida; Tallia, Alfred F.; and Crabtree, Benjamin F. (2008). A Knowledge Management Model: Implications for Enhancing Quality in Health Care. *Journal of the American Society for Information Science and Technology*, 59(3): 489-505.

Based on beta test results, in April 2008 the website was redesigned to be more user friendly and aesthetically appealing. As a way to further increase usability, users of the iConsult teleconsultation program were required to acknowledge and agree to being part of an on-going "beta" test (Pilot) which stated:

> **Please note that this portion of iCons in Medicine is currently in a Beta Test phase.**
> During this time all eligible and interested members may register to become a Requestor. Once the Beta test phase concludes those registered will be notified and may begin to request tele-consultations.
>
> ***By checking here you state you understand that this portion of iCons in Medicine in currently in a Beta Test phase.***

At this time the system was fully operational, and responses received from the program users regarding changes were continually tracked in order to guide further improvements.

The iCons in Medicine network and programs were available worldwide and membership included healthcare professionals from a variety of geographical regions. However, participation was limited to individuals with some level of fluency in English. Though English is among the most spoken languages worldwide, all instructions, forms, and other documents of the iCons in Medicine program were presented in English. This required that all participants in the program possess at least rudimentary knowledge of written English. In 2009 the possibility of conducting a pilot to translate the website, software application, and other materials into another language was investigated as a means to rectify this issue and extend the reach of the iCons in Medicine network. Spanish was selected as the first language for possible translation based on the interest expressed by Jorge Velez, MD, of the Colombian Telemedicine Center. Dr. Velez suggested expansion of the iCons in Medicine program into Colombia, and identified a group of hospitals in large cities and others in vulnerable and remote areas of the country that may be interested in becoming a part of the network. Further, Dr. Velez indicated that the Colombian Telemedicine Center might also be able to incorporate neighboring Latin American countries into this network. The process of translating the website, application, and associated materials into Spanish was initiated and a Spanish-language version of the website providing an overall summary of the program was developed (**Appendix A**). However, translation was cost prohibitive and the pilot effort was aborted.

In late 2010, the CIR began investigating the possibility of supporting a data collection and epidemiology research study pilot project in Kenya with the Field Epidemiology and Laboratory Program Alumni Association (FELP-AA). FELP-AA comprises a group of epidemiologists who allocate 90 percent of their time to tasks assigned by the Ministry of Health and Sanitation. These tasks are primarily related to data collection for disease outbreaks and surveillance. Organizations in Kenya are currently collecting data using a paper-based process to support epidemiology studies, but are interested in exploring electronic means of capturing and managing this data. Through the iConsult program, with participation from MedRed, LLC - a medical informatics company which has offered the use of its mobile application to iCons for this purpose - the CIR would be able

to provide a store-and-forward application to record data, and transmit and store this data on systems which can be used for follow-up analytics. The application will enable the construction of customizable electronic forms for the data to be recorded for the various epidemiological studies, as well as providing a decision support component to enable the clinicians recording data to obtain a second opinion on the diagnosis of symptoms and the prescription of treatment. The FELP-AA members have an interest in the utilization of tools to simplify data collection and analysis, and make the process more accurate and timely. They expressed that they appreciated the features of the CIR/ MedRed solution and look forward to using the software.

An online demo of capabilities which would be suitable for the data collection pilot in Kenya was presented to GIS, a U.S.-based liaison to FELP-AA, in February 2011. In September 2011, a week-long, in-country meeting/assessment trip took place in Kenya with decision-makers and targeted users. Findings indicate that the capabilities offered by the data collection system are needed by the groups that participated in the meetings, and the CIR/MedRed solution will aid in their data collection and analysis tasks by ensuring better data quality and more efficient analysis and reporting. Furthermore, the proposed system does not represent a duplication of a system already deployed in the country. In fact, should the pilot prove successful, the system may become the de-facto standard for data collection in the field. The recommendation was to move forward with the pilot. The Ministry of Livestock Development (MoLD), Dr. Peter Ithondeka, expressed interest in the CIR/MedRed solution and would like to pilot the application as part of the Zoonotic disease surveillance and outbreak response data collection efforts.

Both FELP-AA and MoLD are interested in the pilot commencing early in the 2012 calendar year, with a 6-9 months run, and with the understanding that any assessment activities will need to be completed by the end of September 2012, due to the national elections in Kenya, which are scheduled for November 2012.

Expected Benefits of Pilot Implementation

CIR/MedRed and GIS aim to dramatically improve upon FELP-AA's existing data collection and reporting capabilities, in which information is currently being recorded on paper-based forms and then later recorded into a spreadsheet program. The proposed solution will improve upon their current practices in the following areas:

1) ***Data Accuracy***
   a) Elimination of transcription errors
   b) Form standardization

2) ***Speed***
   a) Real-time synchronization of collected "form data" to the database server
   b) In instances when Internet connectivity is not available, the client application will offer offline "form data" storage capabilities for later upload to the server upon the restoration of network connectivity

3) Reporting Metrics

a) Near-real-time client application dashboard reporting tools, with drill-down capabilities to record level detail
b) Web-portal based access into server-side reporting tools, with dashboard reporting and drill-down capabilities to record level detail
c) Exportable "raw data" in CSV format via the web-portal interface

4) Uniformity of Data Collection

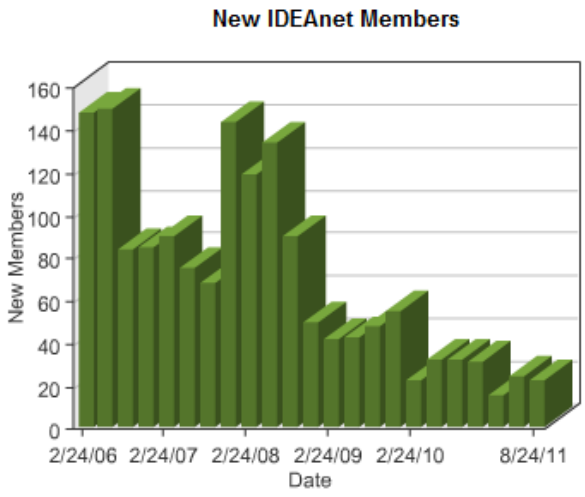
a) The solution provides the ability to synchronize forms and "form data" across all client application deployments, thus ensuring all users are collecting consistent and purposeful information
b) New forms can be created, on an as-needed basis, to meet the data collection needs of a dynamic environment, through the use of the "authoring" tool by a properly trained administrator

It is expected that this pilot will be successful and will lead to a long-term project for data collection in Kenya and other parts of the world where similar studies are underway.

D1: Design and implement metrics for tracking involvement in Communities of Practice and the interactive components of Advanced Distributed Learning courses.

Throughout the course of the grant, basic quan titative metrics were used to assess the usage of the IDEAnet website, a nd measure the ac tivity in intera ctive areas. The following tool was used to track these metrics:

- Google Analytics, a free service from Google that was implemented to track statistics for all CIR websites (http://www.google.com/analytics/index.html).\

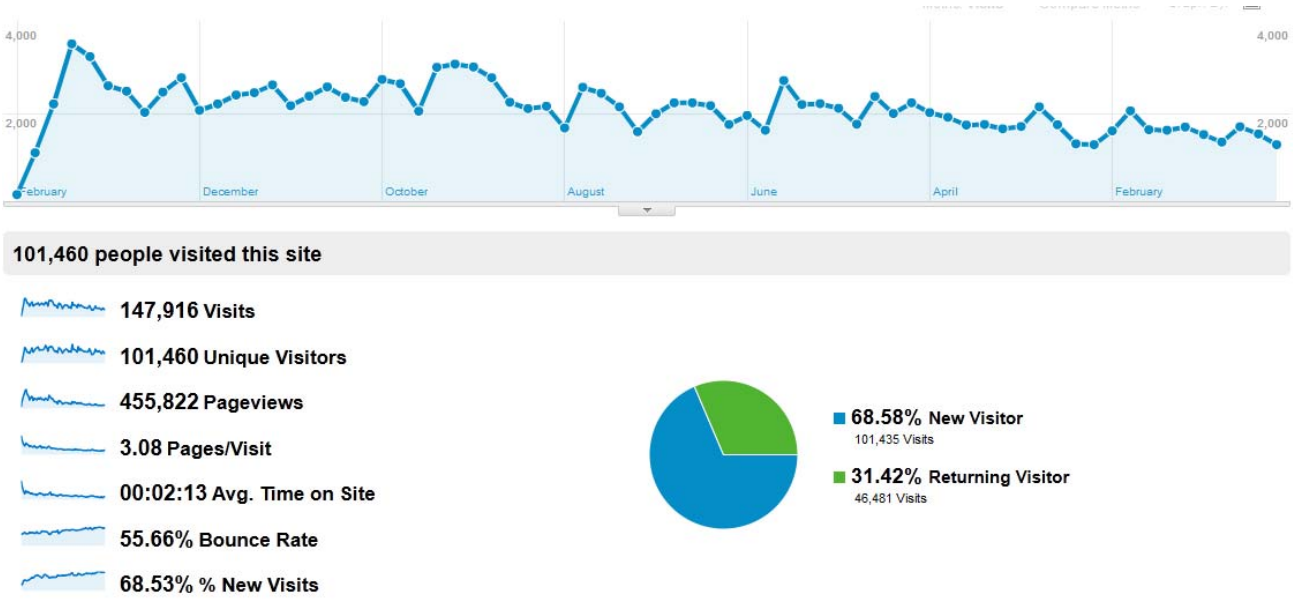


Graph 1 (Above): New members by quarter, February 2006 – November 2011

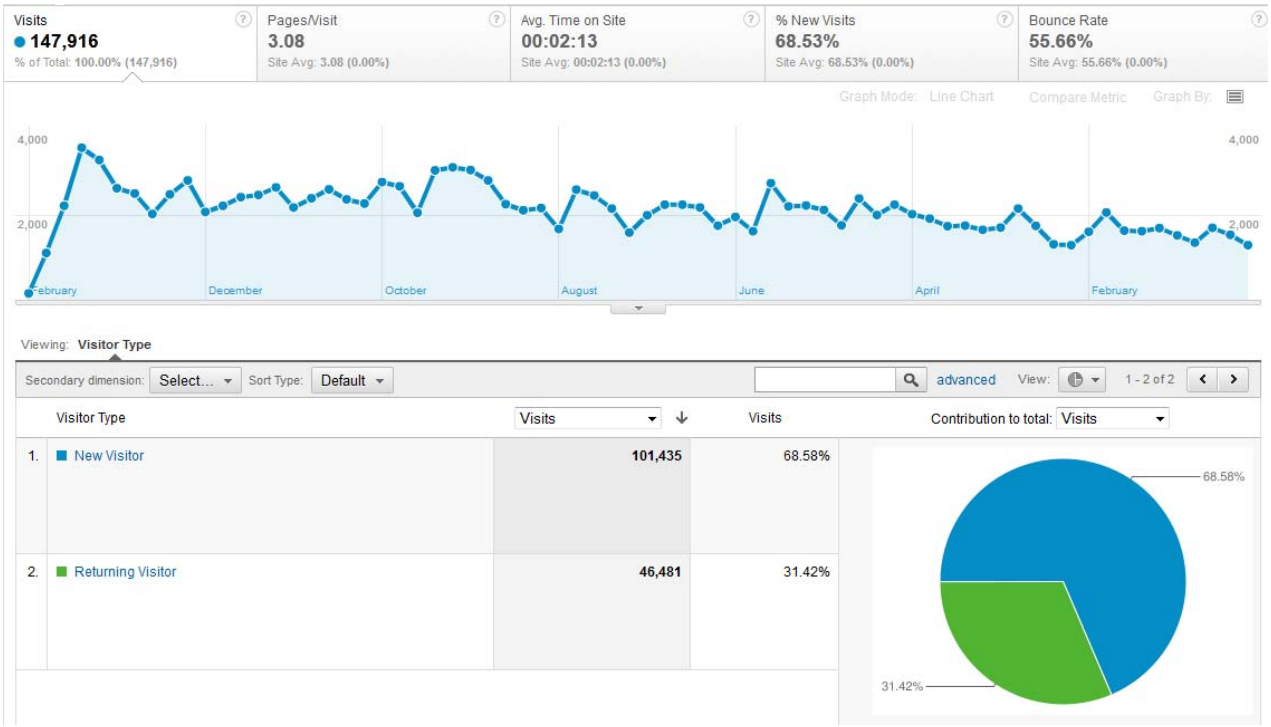
Custom metrics were used to measure certain functions and areas of the IDEAnet website. These tools were written to analyze the sites (Microsoft SQL database using ColdFusion) and to display the results in a password-protected website. Graph 1 above displays a quarterly breakdown of new IDEAnet members February 2006-November 2011. The tables and graphs below display a yearly breakdown of the activity on ideanet.org February 2006 through November 2011.

Date Range	Visits	Visits/Day	Page Views
Feb '06-Feb '07	29,105	79.74	132,414
Feb '07-Feb '08	30,355	83.16	108,989
Feb '08-Feb '09	27,429	74.94	77,489
Feb '09-Feb '10	25,192	69.02	61,421
Feb '10-Feb '11	21,158	57.97	46,373
Feb '11-Nov '11	14,677	53.76	29,136
Totals	**147,916**	**69.77**	**455,822**

Table 2 (Above): Yearly visitor statistics, February to February, '06-'11, and February to November 2011



Graph 2 (Above): Visitors Overview by month, February 2006 – November 2011



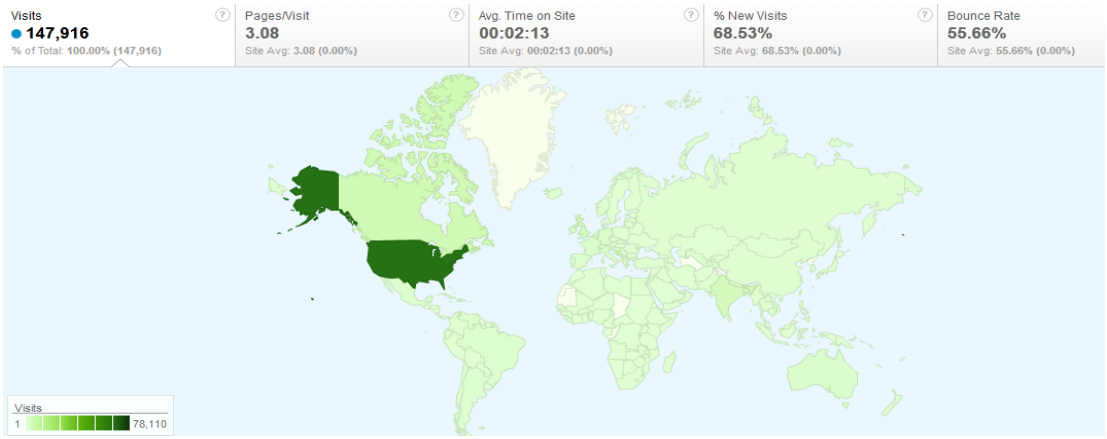
Graph 3: New vs. Returning Visits by month, February 2006 – November 2011



Graphs 4 (above): Traffic Sources by Month - February 24, 2006 – November 23, 2011

Source	Visits	% Visits
google	56,400	87.36%
yahoo	4,415	6.84%
bing	1,069	1.66%
msn	814	1.26%
search	696	1.08%
live	432	0.67%
aol	423	0.66%
ask	177	0.27%
altavista	45	0.07%
netscape	24	0.04%

Table 3 (Above): Top Traffic Sources – February24, 2006 – November 23, 2011



	Country/Territory	Visits ↓	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
1.	United States	78,110	3.34	00:02:16	68.54%	54.05%
2.	Bosnia and Herzegovina	10,488	4.06	00:04:03	14.24%	27.91%
3.	Canada	6,609	2.97	00:01:29	76.94%	56.39%
4.	India	5,167	2.45	00:01:37	92.28%	64.93%
5.	United Kingdom	5,029	2.35	00:01:30	82.82%	63.71%
6.	Germany	2,217	2.60	00:01:28	78.57%	65.31%
7.	France	2,052	2.89	00:01:12	59.45%	53.95%
8.	Italy	1,995	1.72	00:00:47	86.07%	79.45%
9.	Ireland	1,908	2.84	00:02:33	45.81%	55.45%
10.	Australia	1,818	2.39	00:01:38	84.54%	66.56%
11.	Venezuela	1,504	2.00	00:01:06	91.22%	68.62%
12.	Mexico	1,413	2.53	00:01:49	80.61%	67.16%
13.	Brazil	1,376	2.56	00:01:33	83.07%	68.90%
14.	Spain	1,357	2.58	00:01:35	72.73%	62.93%
15.	Jamaica	1,285	1.45	00:01:23	81.56%	83.81%
16.	Pakistan	1,204	2.18	00:02:24	88.95%	67.36%
17.	Serbia	961	2.01	00:00:51	36.42%	59.31%
18.	Argentina	904	3.04	00:02:14	80.09%	55.53%
19.	Netherlands	785	2.43	00:01:23	81.78%	65.86%
20.	Switzerland	736	2.92	00:01:47	69.84%	61.41%
21.	(not set)	724	2.54	00:02:08	70.17%	62.15%
22.	Ecuador	689	2.39	00:01:50	51.09%	65.46%
23.	Serbia and Montenegro	644	2.88	00:01:41	28.26%	51.40%
24.	Turkey	595	2.96	00:02:00	69.75%	63.36%
25.	Colombia	590	2.98	00:02:44	86.61%	60.51%

Table 4: Site visits by country/nation. 147,916 visits came from 203 countries/territories (February 24, 2006 – November 23, 2011). Above are the top 25 nations listed based on the number of visits.

D2: Further develop and refine iCon store-and-forward system for use in medical consultation.

Program Summary

iCons in Medicine is a global telehealth and humanitarian medicine volunteer alliance that uses innovative applications of technology and social networking tools to improve healthcare delivery in remote and medically-underserved areas, and reduce global health disparities. To achieve these goals by leveraging local and regional healthcare providers, and empowering them with tools that can assist in the delivery of care, iCons implemented the iConsult program. iConsult is a teleconsultation environment through which a volunteer network of medical specialists (Volunteers) offer teleconsultation and expert advice to healthcare providers (Requestors) working in remote or medically underserved areas. The program enables communication and information exchange between Volunteers and Requestors who enroll in the program and provides a facility through which expert medical knowledge is available at the point of care, wherever medicine is practiced. Effectively iCons is based on a user registration and vetted membership principle,[66] with users classified as General Members, Volunteers, and Requestors. The membership classification defines the level of access and the features available to a user. In addition, Volunteer and Requestor member credentials are vetted through organizational entities to ensure they are qualified to practice medicine and have the necessary expertise.

The iConsult teleconsultation environment consists of a client and a server component. The client component is a client-server application based on a store-and-forward methodology, using a medical case principle and intended for use by Requestors. It allows Requestors to collect information and document cases at the point of care, irrespective of whether an Internet connection is available. The case information and supporting documentation (images with potential annotations and documents with potential notes) can be uploaded to the server at a later time. The server routes the case to all available Volunteers in the specialty requested. The client-server application also allows for requesting a second opinion on a case from another Volunteer should a Requestor desire another perspective on a case. In the case of a second opinion request, only the original case data is submitted to the iCons Volunteers in the specialty requested, excluding the Volunteer who previously consulted on the case. In this way the confidentiality of the consultation between a Volunteer and a Requestor is protected, and it is up to the Requestor to share information obtained from the Volunteer who initially consulted on the case. This asynchronous communication does not lend itself to working on emergency cases, but is effective for difficult and specialized cases where time is not a critical factor and care can be delivered over a period of days instead of minutes. The server component is a web-based environment, which allows a Volunteer to accept a case and interact one-to-one with a Requestor. The server-side tools enable Volunteers to accept a case in their specialty area and provide advice asynchronously. This advice, usually in the form of messages attached to the case, is received by the Requestor and the

[66] Kamel Boulous, Maged N. and Wheeler, Steve (2007).

communication between the Requestor and the Volunteer continues until the Requestor closes the case. Throughout this process both parties have the ability to add annotations and notes to existing case images and documents, as well as the option to attach additional documentation to the case, in the form of documents, images, or other information. The server component also provides social networking features, typical of those found on popular social networking sites. Users have the ability to create a profile, which becomes searchable by the community. The level of access to the profile information is determined by the membership level of a user. Members have the ability to create and participate in discussions, start real-time chats, and communicate via email messages with other members. In addition, members can upload documents and other information effectively creating a knowledge center focused around their area of expertise.

Program language and security

In 2006, focus for iCon development was on the most appropriate programming language for the standalone application as well as improving the security of it. The original application was written in a program too large to be convenient for users with slow internet connections. The objectives in re-writing the application were to decrease the file size, improve the manageability of the code, and ensure that the application would be compatible with as many operating systems as possible. As a result, HTAs was selected as the new language for the application. The second area of focus for iCon development was improving the security of the application. Although very few identifiers would be collected, given that the software would be collecting patient information, security was a critical issue. An encryption method needed to be developed due to how HTA stores information. On the standalone application, AES encryption was used. On the website side, Rijndael encryption method was implemented. The website users' passwords were also one way encrypted using the MD5 hash algorithm. Images, which are uploaded to the server, were also encrypted using Rijndael encryption. The data between the standalone application and the website is submitted securely over an SSL connection.

Refinements were also made to improve the features and usability of iCon. On the application side, DHTML Menu 4.30 was instituted. It features the look and feel of Windows Classic, Windows XP, Office, Office XP and QNX, and supports keyboard shortcuts and the use of the arrows keys to navigate the drop down menus. Menus were revised to improve ease of use, and a consistent graphical interface was implemented. The website portion, to be used by the consulting physicians, was designed during this year. Website functionality specific to iCon includes registration, user profiles, case view menus with sorting features, image annotation, and response messaging. Other web tools, such as chat, news, and forums, were also developed.

Through incorporating feedback from experts in rural telemedicine and usability, the CIR completed the design and development process for the iCon store-and-forward telemedicine application and accompanying website.

An overview of the iCon network is pictured below:

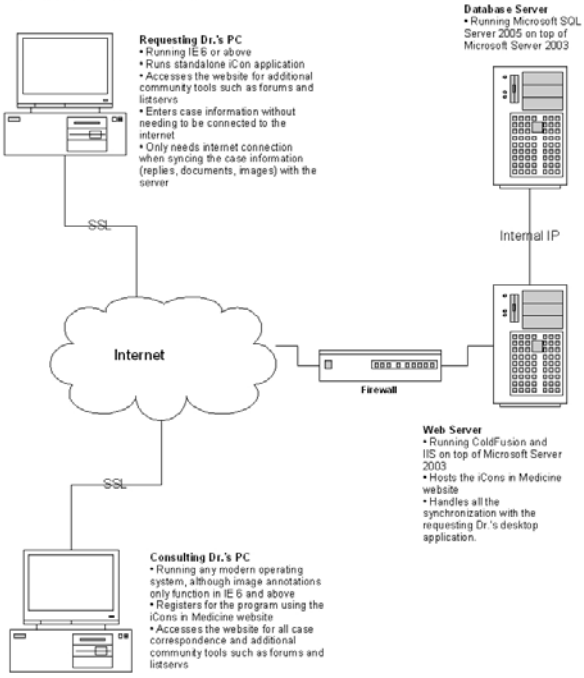


Figure 1 (Above): iCon Network Overview

Membership Structure

Originally the program allowed for individuals to join the program as a Requestor (those requesting teleconsultations) or as a Volunteer (those providing teleconsultations), in 2007 a revamp of the website registration process streamlined the registration to include general membership in the iCons in Medicine network.

- **Volunteer Member**
  - Member of iCons in Medicine Network and iConsult
  - Provides medical teleconsultations to health care providers in remote and underserved areas.
  - Licensed to practice medicine in a recognized iCons in Medicine health care specialty
  - Willing to provide at least three medical teleconsultations a year
  - Organized through Chapters. When applying to become a Volunteer, the individual must select an existing Chapter in the drop down menu or they may choose to begin their own Chapter.

- **Requestor Member**
  - Member of iCons in Medicine Network and iConsult
  - Health care professionals in a remote and medically underserved area in need of clinical advice on difficult cases.

- Licensed or authorized in accordance with local laws and regulations as health care professionals for the role in which he/she seeks a request for a medical teleconsultation.
- Organized through Member Organizations (MO). MOs represent non-profit organizations (e.g., hospital, clinic, or NGO) whose mission and activities are compatible with those of iCons in Medicine. When applying to become a Requestor, the individual must select an existing MO in the drop down menu. The MO would be one that the individual works for or is associated with. If their organization is not an MO, they may ask their organization to become one.

- **General Member**
  - Member of iCons in Medicine Network, not iConsult
  - Individuals maybe a physician or and non-physician
  - Uses the network to exchange information and connect with other members using features of the site (listservs, forums, social networking features) without participating in the teleconsult process.
  - Once registered, those who qualify can apply to become a Volunteer or Requestor in the teleconsulation feature of the website "iConsult."

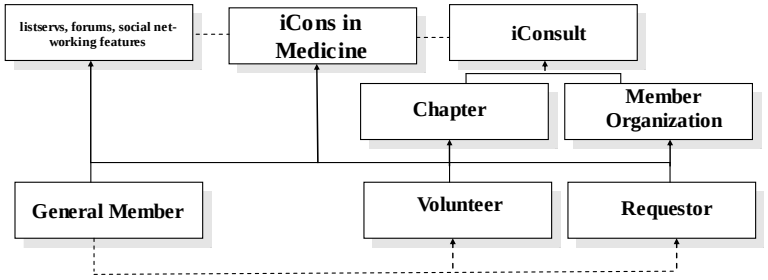


Figure 2 (Above): Participation Structure: iCons in Medicine Network, circa 2007

Database structures and business logic processes were also restructured in 2007 to allow registration of users as both consulting and requesting physicians. This helped to further expand the reach of the system by allowing doctors who request consults, to also provide consults in their own areas of expertise and participate in both ends of the process.

In September 2007, an iCons Teleconsultation Advisory Board (iTAB) (**Appendix B**) was established. This board is comprised of 14 leaders in the telemedicine industry. The iTAB meets quarterly via conference call, more often when necessary. Individual board members are contacted as needed for input or advice. Discussion topics included: Developing the certification criteria; Developing training; Reviewing data sets for QI/QA, outcome measures and suggest focus for ongoing research; Identifying and recruiting individuals to participate in the program in the United States and abroad; and Creating an iCon teleconsulting handbook.

New graphical "Quick Start Guides" (**Appendix C**) were developed and completed for both Volunteer and Requesting physicians to provide them with easy, concise instructions

for registering on the iCons in Medicine System, downloading the store-and-forward software, requesting consults from volunteer physicians, and providing consults to requesting physicians. Policies and procedure documentation was also been developed, gone through legal review, completed and were posted on the website. This documentation includes: Service Agreement, Acceptable Use policy, General Rules, privacy policy and the Medical Handbook. (see **Appendix D** for complete documents)

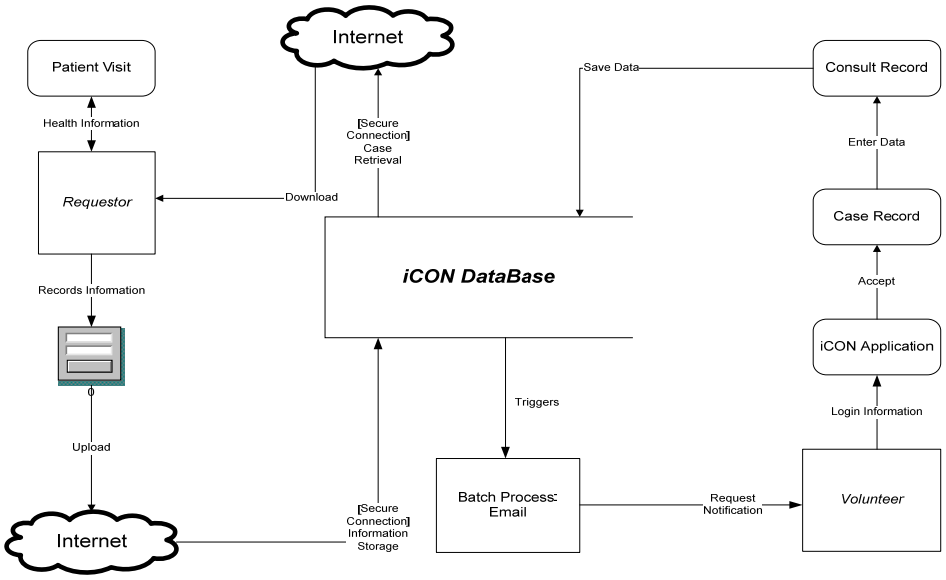


Figure 3 (Above): iConsult- User Collaboration

In 2008, the membership structure added a National Secretariat level as well as iCons International. Figure 6 below illustrates the overall structure, and details follow:



Figure 4 (Above): iConsult- User Collaboration

iCons International- the international governing body and administrative arm of iCons in Medicine. iCons International acts as the default National Secretariat in countries that have not yet formed a National Secretariat.

National Secretariat- recruits and manages Chapters and Member Organizations within a specific geographic area, usually a country. National Secretariats may be formed within an existing entity, such as an academic medical center or major hospital, or as an independent charitable entity established solely for iConsult. **(**See **Appendix E** for National Secretariat insert**)**

Chapter- a group of physicians who volunteer as consultants through the iConsult program. Chapters are responsible for recruiting and enrolling qualified physicians as Volunteers in the iConsult program. New Chapters are formed when three or more Volunteers apply to create a Chapter. **(**See **Appendix F** for Chapter/Volunteer insert**)**

Member Organization- a group of healthcare providers who receive teleconsultation services through the iConsult program. Member Organizations are responsible for recruiting and enrolling Requestors in the iConsult program. Non-profit healthcare delivery organizations operating in remote or underserved areas are eligible to form Member Organizations. **(**See Appendix **G** for Member Organization/Requestor insert**)**

Volunteer- a physician who provides free teleconsultations to health care providers in remote and medically underserved areas through the iConsult program. All Volunteers enroll through a Chapter.

Requestor- a healthcare provider working in remote or underserved areas who requests teleconsultations through the iConsult program. All Requestors enroll through a Member Organization.

Not shown in the diagram is the General Member, as these members are not participants in "iConsult", only members of the iCons in Medicine Network. As mentioned previously, the General Member level gives those in the medical field an opportunity to join the network to utilize social networking tools. However, if a General Member qualifies, they may later chose to participate in the "iConsult" program.

<u>Recruitment efforts</u>

The iCon Network encompasses a number of stakeholders to recruit, including:

- Health Volunteers
- Health Care Providers in Underserved Areas
- Non-Governmental Organizations
- Intergovernmental Health Organizations (WHO, PHAHO, etc.)
- Development Agencies (USAID, CIDA,)
- Health Associations (AMA, WMA, ATA)
- Service Clubs (Rotary, Lions, Elks)
- Exchange Programs
- Faith Communities
- Global Philanthropists/Foundations
- Multinational Health, Pharmaceutical and IT Corporations
- Researchers and Academics

Prior to iCons in Medicine's official launch in May 2008, recruitment efforts began to garner a membership base. In March 2008, the Chicago Medical Society (CMS) (http://www.cmsdocs.org/) a professional medical society that promotes the concept of accessible, quality health services in Cook County, Illinois, signed a Memorandum of Understanding (MOU) with iCons in Medicine and became a Chapter. In April 2008, the Iraqi Medical Sciences Association (IMSA) (www.imsausa.com), a non-profit, non-political professional association for Iraqi medical professionals living in the United States, also signed a MOU and began a Chapter. The CMS and IMSA joined existing Chapters, the National Arab American Medical Association (NAAMA) (http://www.naama.com/home.html) and the University Clinical Center (UKC) in Tuzla, Bosnia. Each of these Chapters concentrated on recruiting their members into the program, initially acquiring 84 Volunteers in the program. Webinars are conducted to introduce the program to groups that have expressed an interest in participating.

After the launch, recruitment outreach in 2008 largely focused on enrolling Chapters and National Secretariats. In June 2008, a mailing was sent to over 100 health specialty organizations in an effort to encourage U.S. Chapters. The mailing was followed by e-mails, phone calls and additional information as needed. Subsequent communications took place with organizations that had been referred. In July 2008 outreach for National Secretariats and continued outreach for Chapters. A special Request for Applications (RFA) was posted on the homepage of iCons in Medicine.

During 2008, National Secretariats were registered for the United States and Bosnia. Expressing interest were Ireland, Egypt, Jordan, Palestine and Syrian Arab Republic. In the summer of 2008 CIR staff traveled through the Western Balkans in an effort to assess health care establishments as National Secretariats. Nine locations were visited within Serbia, Montenegro, Bosnia and Herzegovina, Macedonia and Croatia. As a result, centers in Serbia, Croatia, and Macedonia expressed an interest in becoming a National Secretariat.

Recruitment efforts for Member Organizations (MO) were minimal as it was decided that these groups would be best recruited by National Secretariats. However, through the network connection, about 10 MOs were acquired: 5 in Bosnia, 3 in the USA, 1 in Ghana and 1 in the Syrian Arab Republic.

Functionality & Usability Refinements

In 2008 new administration features were added to allow Chapter and Member Organization (MO) leaders to better manage their group's information and member registration. Previously management was done through iCons International. These new enhancements allowed for faster turnaround times. These functions included the ability to view their group's active cases, as well as membership activity; to switch National Secretariats for Chapters and Member Organizations within a region; to create reports in order to track their group's membership, consults by Specialty and consult Requests by Country; to report bugs/request enhancements.

Website content was added, updated and stream lined to provide a better user experience throughout the system. Navigation structure was revisited and revised to best organize content groups and applications for users. In an effort to simplify case m anagement for Volunteers and Requestors, the iConsult Case screen was redesigned and moved from the iCon homepage to its own page. Cases were no w divided into three sections: 1-Cases I Have Accepted for Consult (for Volunteers); 2-Cases I Have Submitted for Consult (for Requestors); and 3-Cases Awaitin g Consult. This separ ates out th e cases awa iting consult, and makes it easier for Volunteers to browse them and select cases, and k eeps the cases they have selected for consult separate and easy to loca te. With this d esign, Volunteers will see both their accepted cases and cases waiting for consult without having to change any sort criteria on the page.

Aesthetics of the system

In April 20 08 the web site was redesigned to be m ore user friendly and aes thetically appealing website content was added, updated and streamlined to pr ovide a better user experience throughout the system along with a website redesign. **(Appendix H).** A few of these changes include:

- Application buttons for joining iCons in Medicine, forming a Chapter or Mem ber Organization, and the Nationa l Secretariat RF A were ins talled on the hom epage for easy access by viewers.
- A Membership Directory, searchable by na me, country, or m embership level was implemented and listed as a tab in the top bar.
- A "Meet the Members" section was added to the homepage. It displays revolving headshots of me mbers with their name, specialty, and location which are pulled from member profile pages.
- A five m inute video dem onstration of the "iConsult" process was created and added to th e homepage. No special soft ware or download is needed to view. (http://www.iconsinmed.org/uploads/File/demo/Consulting%20demo.htm)
- Rotating images of re mote areas of th e world are shown on the hom epage above the brief description of iCons in Medicine.

Social Networking

In 2009 efforts were focused prim arily on Social Networking to genera te interest in the program and initiate comm unication and discussion am ong members. The following are social networking outlets that were implemented and still employed today:

- E-Newsletter –Every two weeks, the e-newsletter is sent to all members of the iCons in Medicine network, as well as other individuals who have expressed an interest by signing up to receive the e-newsletter – a total of over 725 individuals in the healthcare field and other interested parties. Each issue features information about iCons in Medicine members in the news, as well as current Global Health, and Health IT news. To date, 70 newsletters have been sent. http://archive.constantcontact.com/fs033/1102482325007/archive/1102518353612.html **(Appendix I:1)**

- Blogging — A blog (weblog) is a website, usually maintained by an individual or organization, with regular entries of commentary, descriptions of events, or other material such as graphics or video. Information on a given Global Health/Health IT topic is posted on three popular blogging websites every two weeks (opposite the e-newsletter). The information is applied to three different websites to ensure broad coverage, as different groups may access each. The has been 25,471 total views for the lifetime of the iCons in Medicine Wordpress blog (http://iconsinmedicine.wordpress.com/). **(Appendix I:2)**.

- StumbleUpon - An online community that allows its users to discover and rate Webpages, photos, and videos. StumbleUpon is a personalized recommendation engine which uses peer and social-networking principles. Webpages are presented when the user clicks the "Stumble!" button on the browser's toolbar. StumbleUpon chooses which Webpage to display based on the user's ratings of previous pages, ratings by his/her friends, and by the ratings of users with similar interests. To increase traffic to the iCons in Medicine website and information posted on external websites, StumbleUpon has been utilized.

- Facebook – A social networking website where users create a personal profile account and can add friends, send messages, and share links and other information. In addition to a personal profile, Facebook allows users to create Groups and Fan Pages. Facebook Groups are analogous to clubs in the offline world and Pages function like a profile account, but are specific to a brand or organization. A Profile https://www.facebook.com/iConsinMedicine), Group https://www.facebook.com/group.php?gid=55315437969), and Fan Page (https://www.facebook.com/pages/iCons-in-Medicine/54929163537) have been created to extend the network of iCons in Medicine and raise general awareness of the program. Pages and Groups have also been created for the IDRM and the CIR. **(Appendix I:3)**.

- Twitter – A social networking and microblogging service that enables its users to send and read messages known as "tweets." Tweets are text-based posts of up to 140 characters displayed on the author's profile page and delivered to the author's subscribers who are known as "followers." An iCons in Medicine account has been created and daily updates are posted on technology and health-related topics. This is a further effort to make individuals aware of the program. Lifetime Tweets: 1,411, Total Followers: 2,555. https://twitter.com/#!/iCons_in_Med **(Appendix I:4)**.

- Videos - Videos pertaining to the iCons in Medicine program are posted on two video sharing websites (YouTube and Vodpod). YouTube Channels have also been created for the CIR and the IDRM program. Intermittent videos are produced and posted on these channels to generate and interest in the CIR and its programs. There has been a total of 4,076 views for the lifetime of the iCons YouTube Channel. http://www.youtube.com/user/IconsinMedicine **(Appendix I:5)**.

- Photos - Photos and videos are posted on a Flickr account. http://www.flickr.com/photos/iconsinmedicine/ **(Appendix I:6)**.

Revamping of the client server application

In 2010, the iConsult client-server application (the store and forward application Requestors use, (detailed on page 22, see **Appendix J** for a sample) was further refined to enhance the functionality, usability, and look-and-feel. A detailed set of requirements and Graphical User Interface (GUI) specification was provided to an outside firm tasked with the design and development of the new version of the application. With a revamped client-server there was need for redesign and development of the server component (detailed on page 22). An RFP for the re-design and development of the server component was published and proposals have been received from firms bidding on the work. Specific improvements for the client-server include:

- Enable business users (non-developers) to update content without coding HTML
- Improve social networking features
- Improve scalability of the back end content management system
- Enable the support of the new client application, and provide better integration
- Enhance security and performance

The iConsult program remains fully functional while upgrades to the application are in progress, and will also remain fully functional when work begins on the website.

As technology constantly evolves, iCons tracks developments and trends and stays current by identifying and embracing those technologies that enjoy wide adoption and stand to offer flexibility and enhanced capabilities to its membership. Currently the popularity of smart mobile devices is paving the way for investigating the integration of a mobile application into the existing iConsult laptop/desktop application.

Program Membership

The current membership in the iCons in Medicine network includes over 400 individuals in 12 countries around the world. These individuals represent 35 academic and medical centers, and include renowned experts in telemedicine, e-health, and global health disparities. Over 130 physicians with expertise in 35 medical specialties (**Appendix K**) are available to respond to teleconsultation requests from individuals representing over 20 organizations in 10 countries. Currently the network has 11 Chapters, 134 Volunteers, 27 Member Organizations, 52 Requestors, 3 National Secretariats with 4 under review.

D3: Organize workshops and meetings to expand iCon teleconsultation service and CoPs into underserved areas.

In September 2007, the Center for International Rehabilitation (CIR) conducted its first Continuing Medical Education (CME) event, which served as the launching pad for introducing "iCons in Medicine"- a telemedicine program that uses the Internet to

connect health care providers in rem ote and medically underserved areas with a network of committed volunteer specia lty physicians who act as consultan ts on dif ficult cases. Hosted by Chicago Medical Society (CMS) and moderated CMS president Dr. Saroja Bharati, the three-hour event, focused on hu manitarian relief through international telemedicine. More than 100 physicians and medical students were in attendance.

The CME presenters were Dr. J ay H. Sa nders, President and CEO of the Global Telemedicine Group, D r. Ronald C. Merrel l from Virginia Commonwealth University and Dr. W illiam K. Sm ith of the CIR. Both Dr. Sanders and Merrell are leaders in the telemedicine industry and are active particip ants in the iCon Teleconsultation Advisory Board (iTAB).

Dr. Sanders began the session with a telem edicine presentation "Where We Are and Where We Need to Be." He walked the audience through the portfolio of m edical technologies and applications th at are now in use or in te sting, and then exam ined how information and computer technologies are transforming where the exam ination room of tomorrow will be. Dr. Merre ll presented "International Telemedicine for Humanitarian Goals." He addressed the scope of intern ational and humanita rian medical need, the potential of current technology and resources for international relief, highlighted the accomplishments of telemedicine and e-health for hum anitarian purposes, and introduced future trends for telem edicine in the hum anitarian sector. These two presentations were the perfect l ead-in to Dr. Sm ith, who introduced the CIR's "iCons in Medicine (iCon) program". His presentation titled, "A Vo lunteer Driven, Next Generation, Knowledge Networ k: Toward a P aradigm Shift in Globa l Telehealth and Humanitarian Medicine," (see **Appendix L** for the power point presentation) outlined the program's step-by-step process, which br ings together volunteers in the medical community to prov ide online co nsultation and clinical decision-making support to primary care doctors in m edically underserved areas. The audience rem ained engaged throughout the presentations and participated in the closing panel discussion. All were invited to join the program following the CME.

In March 2008, the CIR presente d iCons in Medicine as pa rt of the Chicago Medical Society Foundation's 2008 Annual Midwest Clin ical Conference (MCC). An educational forum for Chicago health care professi onals, the conference included medical professionals from m ore than 50 specialty and ethnic m edical societies. The two-hour course "Humanitarian Relief through Inte rnational Telemedicine — Inform ation Technology to Build Global Bridges in Medi cine.", was moderated by CMS president Dr. Saroja Bharati. Speakers included Ronald C. Mer rell, MD, FACS f rom Virginia Commonwealth University and Nikola Prvulov, Fields Operations Manager for the CIR.

Dr. Merrell, who is a pioneer in the field of telem edicine, has a long history as advisor and investigator for NASA and the Army offered the audience a glimpse into the research work he has done which e mphasizes management of medical events at a distance including extreme environments. Mr. Prvulov continued the discussion on the benefits of telemedicine and talked to the audience about his experiences working in the field in limited-resource environments. Mr. Prvulov, who has dist ributed wheelchairs and

prothstetic devices to people living in the Balkans and the Middle East, stressed the need of a technological solution that would circum vent the problem s inherent with crossing geographical borders. Both Dr. Merrell and Mr. Prvulov introduced CME participants to the "iCons in Medicin e program". The CME participan ts were inv ited to join the iCon program, and Dr. Merr ell emphasized the program's ability to expand tre atment options for patients who otherwise would not have access to specialty care.

In Chicago May 2008, the CIR together with the Chicago Medical Society (CMS), the National Arab American Medical Association (NAAMA), and the Iraqi Medical Sciences Association (IMSA), officially launched iCons in Medicine at a daylong conference entitled "Telemedicine Support for the Iraqi Health Sector: Buildi ng Bridges through Humanitarian Relief" addressed how to employ telemedicine, communications technologies and an in ternational workforce to strength en the health sector in Iraq **(**See **Appendix M** for meeting materials**).** Program organizers believed iCons in Medicine would build bridges and foster ties within and around that fractured region by making the highest quality medical expertise readily accessible via avai lable technology and without regard to religion, race or politics.

The event took place in conjunction with the visit to th e United States by Dr. Salih Al Hasnawi, Minister of Health of the Republic of Ira q, and was attended by 85 professionals who represent a distinguished cross section of leaders in the field of telemedicine. A two-hour plenary session led by Jay Sanders, MD, President and CEO of The Global Telemedicine Group, included presentations from:

- Riad Almudallal, MD, (President, IMSA) who discu ssed the potential for success for establishing a telemedicine link with the Iraqi health care system.
- Dr. Salih Al Hasnawi (The Iraqi Minister of Health) who spoke about the current health care situation in Iraq and str essed the increased burden on resources as impeding access to health care.
- Dan Sudnick, PhD (Chief Financial Officer of Tragedy Assistance Program for Survivors) who discussed the existing telecommunications infrastructure in Iraq.
- Naeema Al Gasseer, MD (The World Health Organization Representative in Iraq) who spoke about the more recent success of the Iraq Ministry of Health.
- Colonel Ron Poropatich, MD (Deputy Director of the Telem edicine and Advanced Technology Research Cente r) who discussed the U.S. Ar my's experience with store-and-forward telemedicine technology.
- Nabil Khoury, MD (President, NAAMA) and William Kennedy Sm ith, MD (President, CIR) who introduced iCons in Medicine.

At the close of the plenary, invited participants broke up into individualiz ed working groups. The workshops were organized in fi ve key tracks, each of whi ch was led by a Rapporteur:

- **Public Health-** Eric Rasmussen, MD, Innovativ e Support to Emergencies, Diseases and Disasters
- **Health Care Delivery-** Rabih T. Torbay, International Medical Corps

- **Refugee Assistance**- Emmanuel d'Harcourt, MD, International Rescue Committee
- **Medical Education and Training**- Mike Brennan, MD, Medical Alliance for Iraq and Gary Selnow, PhD, WIRED International
- **War Wounded**- Tammy Duckworth, Illinois Department of Veterans' Affairs

The goal of the workshop participants was to discuss and debate ideas as to how telemedicine and communications technologies (i.e., store-and-forward technology, high-bandwidth synchronous connectivity, distributed learning, cellular technology, web-based approaches, etc.) can be applied to the Information Communication Technology (ICT) infrastructure in Iraq within the track area. Once multiple ideas were generated, participants prioritized the strategies to determine the top five potential solutions and then attempted to develop those five ideas into potential programs or projects by focusing on best practices, appropriate use of resources and effective partnerships. After the workshops concluded, the plenary reconvened to share the outcomes of the day. Conrad Clyburn, Director of Emerging Technology at Georgetown University in Washington, DC, addressed the closing plenary by first introducing Pat Patierno, Executive Director, Bureau of Public Affairs, U.S. Department of State. Mr. Patierno discussed the International Trust Fund for Demining and Mine Victims Assistance (ITF). The ITF model of international cooperation and co-funding was presented as a possible model for building a similar fund to assist health care in the Middle East. Mr. Pateirno was followed by each Rapporteur who presented a summary of their group's ideas.

Volunteers from the Chicago Medical Society, the National Arab American Medical Association and other medical organizations from around the world agreed to participate in the "iCons in Medicine program" by providing free assistance and consultation on a minimum of three cases per year. The conference and progress of the iCons in Medicine program received substantial media coverage, including articles featured in *JAMA*, *The Chicago Tribune*, and a number of other publications.

Following the devastating earthquake which struck Haiti on January 12, 2010, individuals were invited to become members of the iCons in Medicine program to provide assistance to the nation. The iCon website was amended to allow individuals to sign up as Volunteers in a Haiti Chapter and provide teleconsultations, receive notification of volunteer opportunities in Haiti, and for hospitals to register to accept patients airlifted out of Haiti for medical treatment. In February 2010, the CIR's Dr. William Kennedy Smith and Hector Casanova, CP took part in a five-day trip to Haiti to assist the International Medical Corps (IMC) with planning activities to ensure the provision the post-operative care, and sub-acute and physical rehabilitation services to earthquake victims.

The outreach effort was pursued through the CIR's existing iCon network, as well as social networking resources that have been put in place. These include:

- Information posted on the iCon homepage with a link to the specifics about the requested items (i.e., sizes, style, condition; where to send donations)

- Tweets on Twitter (iCons in Medicine and IDRM)
- Information posted on Facebook in Groups and Fan Pages (iCons in Medicine, CIR, and IDRM) and on the "personal" profile
- Production of a short video showing the devices needed and providing additional details. This video was uploaded to YouTube (iCons in Medicine, CIR, and IDRM channels), the Facebook Groups and Fan Pages, and was also embedded on the CIR Instructables page
- A post was added to the iCons in Medicine blog regarding the need for donations of these items. This post included links to areas of the iCons in Medicine with additional information on the specifics of the needed items and where to send donations
- An announcement in the e-newsletter and additional e-blast message to all members of the iCon network

In May 2010 the iCons Telemedicine Advisory Board (iTAB) hosted a meeting at the ATA annual meeting in San Antonio, Texas. CIR/iCons's Haiti efforts were recapped for the group which initiated the conversation of iCons role in future natural disasters. It was determined that iCons would best function as a "clearing house" providing online pre-coordination for emergencies in these situations. The suggested course of action is as follows:

- Start coordination efforts to prepare for similar events in the future
- Use an Open Content model to provide useful tools to disaster relief healthcare workers
- Pre-qualify organizations to be called upon when a natural disaster strikes
- Encourage participation of iCon volunteers to provide teleconsultations to afflicted areas.

A mobile application development plan was also presented to the iTAB by staff. It outlined how the development of a mobile application would address needs of medics worldwide, through data capture, storage, retrieval, decision support and consultation. MedRed, a medical informatics company, has offered the use of its mobile application to iCons, for this purpose. Patient outreach capabilities have also been discussed, as part of a comprehensive offering, whether deployed in disaster areas or underserved parts of the world. Leveraging the proliferation of mobile phones, it will be possible to provide general prevention information, clinic locations and next steps following a diagnosis and treatment.

In June 2010, staff exhibited at the American Medical Association Medical Student (AMA-MSS) Medical Specialty Showcase. The purpose of this event is to provide an introduction to various specialties to medical students, and offer promotional materials to assist career decision-making. While one must be a licensed physician to participate in the iConsult program, medical students were encouraged to sign up for iCons in Medicine as a General Member. This allows individuals to interact with others in the healthcare industry using the social networking tools provided until they are qualified to participate in teleconsultations. Approximately 50 students wished to find out more about iCons, and

most took at least the one page handout that showed how medical students could participate in the program as General Members.

Staff also attended the 2010 mHealth Summit held in Washington, DC in November 2010. This event convened leaders in research, technology and policy to share their expertise and draft a blueprint for the future of mobile health.

policy to share their expertise and draft a blueprint for the future of mobile health.

D4: Continue work on disability rights using IDEAnet for reporting applications.

The International Disability Rights Monitor (IDRM) is an international grass-roots research project designed to document and assess the status of people with disabilities worldwide. It represents an ongoing collaboration between the CIR and international and national disability groups. The IDRM is the world's only systematic, international disability rights shadow monitoring project focusing on disability rights.

Starting in 2003, the IDRM project released a landmark series of regional reports (Americas, Asia and Europe), as well as a thematic report on disability and tsunami relief efforts and a compendium report. The regional reports focus on several key areas such as legal protections, education, employment, accessibility, and health and housing services for people with disabilities. They include a collection of country reports and also a report card which displays at a glance the extent to which fundamental human rights protections for people with disabilities have been implemented in each country across each region. These reports have been submitted and used, along with official government reports, by the UN Special Rapporteur on disability to judge international compliance with the UN Standard Rules. All of the IDRM's reports are available for download on www.IDRMnet.org.

Summary of reporting period

In 2006 the United Nations adopted a Convention, or treaty, to protect the human rights of people with disabilities. In preparation for the IDRM *Regional Report of Europe,* the first of its kind following the passage, the CIR developed a course comprised of 8 modules in the area of disability rights and human rights covering legal protections, disability rights research and monitoring, and rights promotion in order to train researchers for the International Disability Rights Monitor (IDRM) project. The modules are as follows:

Module 1: **Overview of the International Disability Rights Monitor-** Prepares researchers to effectively describe the IDRM and its goals to research subjects; Provides a legal and social context on how disability rights fit within a human rights framework.

Module 2: **Research Administration -** Informs researchers about participants and communication structure of the IDRM research network; Provides researchers with background on research administration policies.

Module 3: **Ethical Research and Human Subjects Protections -**Prepares researchers to conduct research according to ethical guidelines and appropriately handle the human subject component of panel discussions.

Module 4: **Research Techniques -**Provides researchers with a basic understanding of research techniques, sources of information, and different types of data.

Module 5: **Conducting Effective Interviews** -Provides researchers with strategies to arrange and conduct interviews with a variety of research subjects.

Module 6: **The IDRM Questionnaire Tool** -Prepares researchers to fill out the IDRM questionnaire both online and on hard copy.

Module 7: **Facilitating Group Discussions for Research and Advocacy -**Prepares researchers to host and moderate panel discussion in order to meet both research and advocacy goals.

Module 8: **Writing Your IDRM Country Report -**Prepares researchers to write a comprehensive, well-documented IDRM report.

Researchers for the IDRM *Regional Report of Europe* were required to complete the course prior to beginning research on their assigned country. Monitored and managed by the CIR Regional Coordinator, the course was delivered online through Moodle -the CIR's Learning Management System. Participating in the course were the 14 researchers from European Union countries: Armenia, Bulgaria, Estonia, Finland, Germany, Greece, Ireland, Netherlands, Poland, Russia, Serbia, Spain, Turkey and the United Kingdom.

In 2007, post online training, continued support was provided to researchers through pre-publication, e.g. one to one meetings, emails and phone calls with the Regional Coordinator; three rounds of editing, fact checking and clarification; creation of an IDRM Research project group on IDEAnet with tools to chat, discussion forums, document repository and a listserv. To aid researchers in their outreach efforts following publication, they were provided with a media packet in hard copy and digital format posted in the project group on IDEAnet and were provided media training. Each researcher also recieved a supply of hard and digital copies of the complete report and digital copies of their individual country report. Connections were made between researchers and partner organizations (EDF/ONCE) to formulate local advocacy strategies and report launches.

In December 2007, researchers launched the report in individual European countries to coincide with European Day on Disability. These launches involved many stakeholders

including government officials, policy officials, disability activitists and human rights organizations. Overall the report was received enthusiastically and more than 300 copies have been requested.

A new website IDRMnet.org was created to showcase the IDRM European Report (http://www.idrmnet.org/reports.cfm) as well as previous reports, IDRM Goals, Researchers and the Convention (see **Appendix N** for screenshot of the website).

In 2008, the IDRM was presented at a Korea Disabled People's Development Institute (KODDI) conference in Seoul, South Korea regarding the disability anti-discrimination legislation that was recently passed there. It brought together individuals, organizations and policy makers to discuss implementation and monitoring of this new legislation. The presentation offered insight of the unique monitoring tools that the IDRM project has to offer to the disability-related NGOs and advocates present, in the hopes that their country will participate in the project. IDRM was also presented as a model for monitoring at a meeting in Brussels.

In 2009, the CIR utilized several social networking outlets to generate interest and encourage participation in the IDRM project. These included:

- Blogging — Information on disability and disability rights-related issues posted on three popular blogging websites intermittently to ensure broad coverage. Total of 1,807 views for the lifetime of the Wordpress blog http://theidrm.wordpress.com/ **(Appendix O:1)**
- Facebook – A Group (https://www.facebook.com/group.php?gid=54526648977) and Fan Page (https://www.facebook.com/pages/The-International-Disability-Rights-Monitor-IDRM/68059862880) have been created to extend the network of IDRM and raise general awareness of its projects. **(Appendix O:2)**
- Twitter – An IDRM account has been created and intermittent updates are posted pertaining to disability and rights. This is a further effort to make individuals aware of the program . http://twitter.com/#!/The_IDRM. Tweets: 341 Followers: 503. **(Appendix O:3)**
- Videos - Videos pertaining to IDRM projects are posted on YouTube, a popular video sharing website. Total views of IDRM: 3,776 **(Appendix O:4)**

The IDRM's network of researchers have been invited to contribute whenever possible.

In July 2009, the United States joined more than 100 countries that have signed the Convention on the Rights of People with Disabilities (CRPD) since it was adopted by the United Nations in December 2006. In recognition of its contributions, the CIR/IDRM participated, as one of the few invitees to attend the actual signing of the CRPD by Ambassador Rice at the UN in New York City.

Also in 2009 the IDRM research methodology was adapted to reflect the CRPD. This process included a comprehensive update of the existing IDRM methodology, as well as the establishment of a peer-review group to provide comments and feedback to ensure that the revised methodology was of the highest standards. The peer-review group was

comprised of representatives from a number of international disability organizations who have an expertise in disability law and policy and also access to a network of people with disabilities. Collaborating with other disability organizations and attending a number of international meetings at the UN in 2010 and 2011 have helped IDRM staff to formulate a draft text of the new IDRM methodology for peer-review. The peer-review process included a four-month period during which feedback was given on the newly developed methodology through a project group on the iCons in Medicine website. The iCons online platform enabled the group members to interact with one another and with IDRM staff. Along with the opportunity to exchange ideas and information through the discussion features of the project group, resource materials pertaining to monitoring were also uploaded so that group members had access to up to-date information on the topic. Upon completion of the feedback stage, a final document incorporating the feedback was circulated to group members. The final document on monitoring disability rights will be circulated to the peer-review group members for distribution among their networks and also will be made available on the IDRM website. The methodology will be translated into French and Spanish to ensure wider use among disability networks.

In line with the updated methodology, the IDRM is also in the process of updating its training methodology. The IDRM training program equips Disabled Peoples Organization's with the skills to carry out research in their own countries on the status of persons with disabilities. Using online platforms and social media, the updated training programm will be completed by end of February 2012.

In late 2009 work began to develop a special edition IDRM publication that will document the process by which the CRPD came to fruition. This report will capture the evolution and inception of the CRPD, and will gather details from central participants in the process. All chapters are to be completed by the end of December 2011 with tentative publication date set for May 2012 in line with the 7th anniversary of the Convention entering international law. The CIR intends to present this special edition IDRM publication to the Secretary of State as a record of the process that led to the adoption of the Convention.

The following are Draft Chapter Working Titles, Content, and Authors:

Chapter 1: The IDRM Journey
Author: Dr. William Kennedy Smith
Discusses the project's successes since its establishment in 2003.
Highlights the key role that civil society must take in monitoring disability rights, and discusses the future plans for the IDRM.

Chapter 2: Making Disability An Issue for International Law
Author: Ambassador De Alba
Discusses the instrumental role that Mexico played in introducing the General Assembly Resolution that established the Ad-Hoc Committee.

Chapter 3: The Early Days
Author: Ambassador Gallegos
Discusses the beginning years of the CRPD negotiations.

Chapter 4: Bringing the Negotiations to An End
Author: Ambassador MacKay
Discusses the different strategies used by to bring about the negotiations.

Chapter 5: The UN Special Rapporteur and the CRPD
Author: Mr. Shuiab Chalklen, UN Special Rapporteur on Disability
Discusses how the role of the UN Special Rapporteur has developed since the adoption of the CRPD.

Chapter 6: The CRPD – Key Legal Issues
Author: Professor Gerard Quinn
Discusses the strategies used to overcome key legal areas during the AD-Hoc negotiations.

Chapter 7: Civil Society's Role
Author: Stefan Tromel, Executive Director of the International Disability Alliance

Chapter 8: Official delegate experience
Author: Ms Pirkko Mahlmaki, former IDRM researcher and winner of the Finland prize for human rights will write about her experience as an official member of the Finnish government delegation.

B. Research and Development of Advanced Distributed Learning Materials

R1: Research existing literature and tools available for program and web design for Open Content development.

The development of Open Content materials ensures that the reach of these materials extends to as wide and varied of an audience as possible. These materials are defined as items, often of a creative nature, which are made available for use [67] and can include images, videos, and text, as well as other forms of Open Educational Resources (OERs). "Open Content," a term often used in conjunction with "Open Source," is defined as software for which the code is made publicly and freely available.[68] Though there are important differences between them, both Open Content materials and Open Source code aim to ensure that materials and information are available and accessible.

The development and refinement of Open Content materials within online communities has become increasingly common, due in large part to the marked increase in the amount

[67] As defined by Sharing Resources in Education (SHARE) (http://www.share.uni-koeln.de/?q=en/glossary/29).
[68] As defined by Princeton University (http://wordnetweb.princeton.edu/perl/webwn?s=).

of user generated content available online. [69] In spite of the quantity of these types of materials, experts note that their success is dependent on the reliability of their source.[70] As noted previously, in online communities, verification of user credentials can be problematic.[71] While limiting membership to individuals who have been vetted can lessen the variance of input on OERs, the materials produced are likely to be of higher quality and their contents to be valid and pertinent.

According to Ellaway and Martin, Open Content materials possess a level of sustainability that other resources may not,[72] and much like Open Source software, this sustainability provide cost savings as their associated maintenance costs are significantly lower.[73] Wide distribution of OERs is also likely as the collaborators who take part in their development are likely to wish to share them with others. By ensuring that the collaborators are from a variety of cultures and backgrounds, it is also possible to empower individuals developing OERs "with the ability to recontextualize the material, translate it into their own language and take ownership of it" [74] and share it with their peers.

While OERs are frequently delivered using a web-based approach, they can also be created for delivering on mobile devices. The number of mobile devices worldwide continues to increase and they are becoming a "part of the 'digital life' for many individuals around the world. [75] There are an estimated 4.6 billion mobile phone users worldwide, with three-quarters of these in the developing world.[76] Further, Ericsson reports that mobile broadband subscriptions are on track to surpass one billion by the end of 2011,[77] and that while an Internet connection may not be available in some regions, mobile devices are commonplace and fully supported. An example of this can be seen in a 2009 United Nations report which indicates that only 16 percent of Palestinian households have Internet access, but 81 percent have a cell phone. [78] Despite the proliferation of cell phones, it is important to note that in many regions, just as Internet connectivity may be limited, only voice calling and text messaging devices may be

[69] Cheliotis, Giorgos (2009). From open source to open content: Organization, licensing and decision processes in open cultural production. *Decision Support Systems*, 47: 229-244.
[70] Remmele, Bernd (2006). Open Educational Resources – anonymity vs. specificity. *European Journal of Open, Distance, and E-Learning*. Accessed online 9/15/2011 - http://www.eurodl.org/?p=archives&year=2006&halfyear=2&article=245
[71] Kamel Boulous, Maged N. and Wheeler, Steve (2007). The emerging Web 2.0 social software: an enabling suite of sociable technologies in health and health care education. *Health Information and Libraries Journal*, 24: 2-23.
[72] Ellaway, Rachel and Martin, Ross D. (2008). What's mine is yours – open source as a new paradigm for sustainable healthcare education. *Medical Teacher*, 30: 175-179.
[73] Strom, David. "Open-Source Software, Now." *Baseline Magazine*. Updated October 15, 2010. Accessed Online 9/15/2011 - http://www.baselinemag.com/c/a/Application-Development/OpenSource-Software-Now-280193/
[74] Baraniuk (2006) as noted by Ellaway and Martin.
[75] Churchhill, Daniel and Hedberg, John (2008). Learning object design considerations for small-screen handheld devices. *Computers & Education*, 50: 881-893.
[76] The Economist. "Mobile Work: A way to earn money by texting." *The Economist*. Updated: October 28, 2010. Accessed online 9/15/2011 - http://www.economist.com/node/17366137?fsrc=scn%2Ftw%2Fte%2Frss%2Fpe&story_id=17366137
[77] *Reuters Online*. "Mobile broadband users seen hitting 1 billion in 2011" Updated: January 11, 2011. Accessed online 9/15/2011 - http://www.reuters.com/article/idUSTRE70A2JS20110111
[78] Lloyd, Robin. "Mobile Phones for Women: A New Approach for Social Welfare in the Developing World" *Scientific American*. Updated: December 17, 2010. Accessed online – 9/15/2011 - http://www.scientificamerican.com/article.cfm?id=mobile-phones-for-women

available.[79] In most areas of the United States and Europe, however, smartphones have become increasingly common, particularly among healthcare providers,[80] and a reported 72 percent of physicians utilize them both personally and professionally.[81] [82] Additional reports indicate that these devices have also become increasingly common among other groups of healthcare providers, and a reported 74.6 percent of nurses in the US use smartphones or tablets.[83]

A recent study from the Pew Internet and American Life Project found that there are now more than 250,000 mobile applications available for iPhones, 30,000 for Android smartphones, and several thousand for Blackberry devices.[84] Though a large portion of these applications are health-related, and many are intended for use specifically by patients or physicians, the Food and Drug Administration (FDA) continues to work to develop appropriate guidelines for medical applications on mobile devices.[85] These health-related mobile applications are also more common now than ever, and have been developed to aid in the diagnosis, management, and treatment of a number of chronic conditions, as well as for elder care[86] and post-traumatic stress disorder.[87]

Updates and improvements have been made the iCons in Medicine desktop application to ensure that they are user-friendly and that information meets the users' needs. After completion of the changes to the software, the website will require revision to ensure that it is fully compatible with the updated desktop application.

D1: Continue to develop and/or refine educational materials.

All of CIR's educational content goes through a versioning process and a series of content refinements intended to make it culturally appropriate for the setting in which it will be used. During the 2006 grant year, CIR developed Train the Trainer manuals for Healing Hands for Haiti and The Range of Motion Project (ROMP) as well as adapting

[79] Giridharadas, Anand. "Where a Cellphone Is Still Cutting Edge." *The New York Times*. Updated April 10, 2010. Accessed Online 9/15/2011 - http://www.nytimes.com/2010/04/11/weekinreview/11giridharadas.html
[80] CSC. "CSC Launches UK Mobile Solution for Healthcare Workers on Blackberry Smartphones." *eHealthNews.eu*. Updated: October 12, 2010. Accessed Online 9/15/2011 - http://www.ehealthnews.eu/csc/2290-csc-launches-uk-mobile-solution-for-healthcare-workers-on-blackberry-smartphones
[81] Dolan, Pamela Lewis. "Physician smartphone popularity shifts health IT focus to mobile use." *American Medical News*. Updated: August 23, 2010. Accessed Online 9/15/2011 - http://www.ama-assn.org/amednews/2010/08/23/bil10823.htm
[82] Fuquay, Jim. "Doctors using smartphones, tablets to access medical data." *Mom2mom.* Updated July 6, 2011. Accessed online: 9/15/2011 - http://www.star-telegram.com/2011/07/05/3201630/doctors-using-smartphones-tablets.html#tvg
[83] Gullo, Chris. "75 percent of nurses own smartphones or tablets." *MobiHealthNews.* Updated November 1, 2011. Accessed online 11/2/11 - http://mobihealthnews.com/14361/75-percent-of-nurses-own-smartphones-or-tablets/
[84] *Pew Internet and American Life Project*. "Mobile health apps." Updated October 19, 2010. Accessed online: 9/15/2011 - http://pewinternet.org/Reports/2010/Mobile-Health-2010/Report/Mobile-health-apps.aspx
[85] Dolan, Brian. "FDA drafts mobile medical app regulations." *Mobihealthnews.* Updated July 19, 2011. Accessed online: 9/15/2011 - http://mobihealthnews.com/11970/fda-drafts-mobile-medical-app-regulations/
[86] Lewis, Nicole. "Mobile Health Elder Care Apps Get Funding." *Information Week.* Updated August 1, 2011. Accessed online: 9/15/2011 - http://www.informationweek.com/news/healthcare/mobile-wireless/231002932?cid=nl_IW_healthcare_2011-08-03_html
[87] Daily Mail Reporter. "Healing apps: Pentagon uses smart phones to treat PTSD." *The Daily Mail Online.* Updated July 27, 2011. Accessed online 9/15/2011 - http://www.dailymail.co.uk/sciencetech/article-2018939/Healing-apps-Pentagon-uses-smart-phones-treat-PTSD.html

CIR's prosthetics and orthotics content into a national educational program for use by the Bosnian Ministries of Health and Education. In addition, guidelines for adapting content for use in Iraq have been developed.

In 2006, in order to extend the reach of its Distance Learning educational programs in prosthetics and orthotics, originally launched in Latin America and the Balkans, the CIR explored licensing, consulting, tuition, and train-the-trainer models of dissemination.

Prosthetic training materials and technical assistance was provided to Walter Reed Army Medical Center staff in advance of their mission to Iraq to train prosthetists employed by the Iraqi Ministry of Defense. The training took place in Iraq with two Iraqi prosthetists for 12 weeks. Didactic training and hands-on practical/clinical training were both provided. Following this training, the Walter Reed staff suggested the following adaptations to improve cultural appropriateness of CIR's materials for trainings in Iraq. Among the suggestions were- a) Arabic translator with Medical/Prosthetics background, b) Avoid references to manufacturers, c) Simplify written evaluations, d) high technology products and fabrication supplies were available.

Following this successful training in Train the Trainer, Healing Hands for Haiti decided to launch its first distance education course in transtibial prosthetics in mid-May 2006 in Haiti. During this pilot with Healing Hands, several important modifications were made in order to adapt the program to the circumstances in Haiti. Due to problems with internet connectivity, on-line chat sessions were curtailed and printed materials were developed and distributed to the students. A number of non-English speaking students were interested in the course, so it was necessary to translate the course materials into French in order to expand the program in Haiti. Healing Hands worked with volunteers in Canada to complete the translations.

The CIR developed a package of participant materials for the Train the Trainer program- a program which enables administrators and direct providers of rehabilitation services to offer continuing education to their technicians. This package included the CIR's educational content; course delivery services, including a course website and assessment and communication tools; training on course administration; a one day face-to-face workshop in Chicago; a training manual detailing the structure of the curriculum and the roles and responsibilities needed to ensure a successful learning experience for the students; and a hybrid CD-Rom with course materials and access to online communication tools.

In 2007 the CIR and the University Klinical Center (UKC) worked with the Iraqi Ministry of Health to develop a short-term upgrade training program for physical therapists (Physiotherapy) with previous clinical experience. The objective of the course/training is to improve the clinical skills of physiotherapists through training on modern treatment and rehabilitation techniques; to train physiotherapists to work in existing and future rehabilitation centers in Iraq, so as to develop appropriate community-based services; to develop the skills and capacity to work as part of a rehabilitation team,

and to facilitate multi- and inter-disciplinary teamwork between rehabilitation professionals

The course/training includes both theoretical and practical components, combining academic /theoretical instruction with applied exercises (workshop/practical, hands on) on the latest technological achievements in physiotherapy. 490 pages of content had been developed and/or adapted by experts in physical medicine and rehabilitation from the UKC, under the direction of Dr. Suada Kapidzic Durakovich, a physical medicine and rehabilitation expert. The training and course content covers four areas:

1. Limb fitting and amputee rehabilitation
2. Neurological rehabilitation
3. Pediatric rehabilitation
4. General rehabilitation

Each of the four sections includes lectures developed by experts in Physical Medicine and Rehabilitation from the faculty of the UKC Medical School and content experts from the CIR, Northwestern University, and Children's Memorial Hospital and outside U.S. Consultants. Additionally, each section includes a mentorship requirement.

Collaboration on this course/training was done via a P.T. Content Development Project Group on IDEAnet.



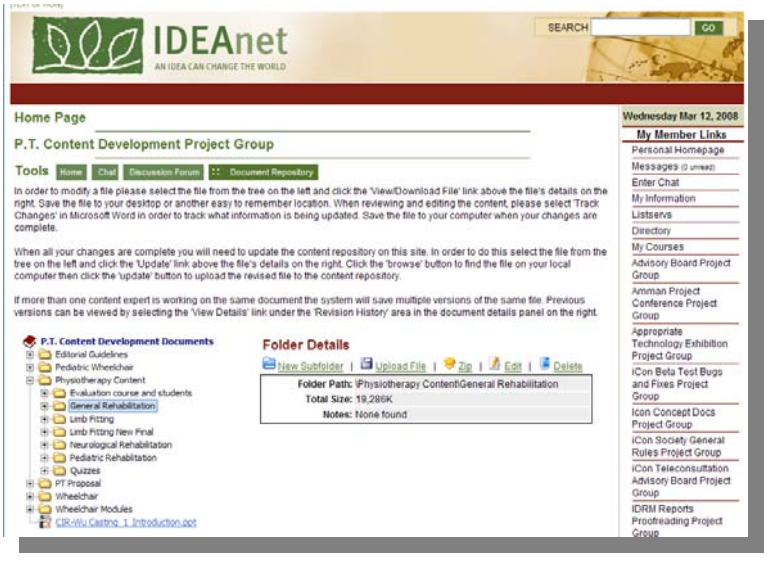


Figure 5 (above left): Screenshot of PT Content Development Project Group Forum
Figure 6 (above right): Screenshot of PT Content Development Project Group Document Repository

All materials developed by the CIR for training purposes are SCORM-compliant. Per the Office of the Under Secretary of Defense for Personnel and Readiness, the Sharable Content Objects Reference Model (SCORM) is a set of "standards and specifications adapted from multiple sources to provide a comprehensive suite of e-learning capabilities

that enable interoperability, accessibility and reusability of Web-based learning content." The "sharable instructional objects" (or SCOs) specified by SCORM, allow for materials to be shared, used, and reused without requiring a standardized computer configuration, operating system, or browser (Fletcher, Tobias, and Wisher, 2007). Thus, SCORM promotes the open dissemination and use of SCOs to allow for more effective Advanced Distributed Learning (ADL).

Per Booth (2004), SCORM has three parts: 1. Metadata, 2. Interface, and 3. Packaging.

- Metadata specifies which portions of information, such as the author, title, and language should be included. This information allows SCOs to be added to other databases and tagged in a standard fashion so that they are more easily searchable.
- The Interface is a set of commands that allow for communication between the Learning Management Systems (LMS) and the SCO. Interface information often includes a protocol for starting the SCO, as well as a list of commands that allow the learning object to communicate with the LMS.
- How a SCO is packaged (the Packaging) defines the way that the files are named and which folders contain what information.

The standardization of information contained in the metadata, interface, and packaging make items created as SCOs more easily searchable and available to users.

The SCORM standard has been widely implemented, and its use allows for tests or other documents to be created as SCOs and delivered using a variety of LMS (Booth, 2004). Further, SCORM allows for the creation of content using an editor from one supplier to be exported as an SCO, and then delivered using a LMS from another supplier.

IDEAnet Project Groups implemented the use of SCORM, allowing members to upload and share SCORM-compliant SCO documents. In a SCORM project group, all uploaded documents are automatically converted to a SCORM-compliant package with appropriate metadata. The CIR continues to offer this capability within the IDEAnet Project Groups. The CIR also employs Moodle, a SCORM-compliant LMS, as its course management software for distance education programs.[88]

In April 2009, a Project group was created on the iCons in Medicine website to allow for the distribution of materials to members of the faculty of P&O programs nationwide. Materials regarding the CIR Casting System and other CIR technologies were compiled and posted as a part of a collaborative webinar presentation by the CIR and the Northwestern University Prosthetics and Orthotics Center (NUPOC). This collaborative effort was aimed at encouraging the inclusion of appropriate CIR prosthetic technologies in the curriculum of prosthetic training and education facilities nationwide. Through this webinar materials were presented to offer an introduction to the CIR technologies. These included:

[88] Moodle is a free system that can be employed to conduct courses online, as well as to supplement face-to-face interaction. In addition, it is fully scalable and allows for deployment to a wide or very tightly focused audience. http://moodle.org/

1. Information about the dilatancy phenomena and description of its use in the CIR Casting System for transtibial impressions.
2. Description of the benefits of utilizing a "plaster-less" technique for taking transtibial impressions.
3. Instructions regarding how to fabricate the necessary components utilized in the CIR Casting System and how to set up the components to utilize the system.

This collaborative effort served as the critical foundation to ensure a long-term impact of the CIR's technologies, which were developed specifically to enhance the lives of individuals with disabilities, especially those with amputations, and those in areas with limited resources.

Following the successful use of the Project Group structure to deliver materials to a select group of individuals, a second group was established in January 2010. Within this group, materials pertaining to the CIR technique for stump care, including videos, articles, and a Power Point presentation, were shared with a group of individuals in the field of rehabilitation and physical medicine. These individuals had expressed an interest in learning more about the CIR technique for stump care in order to ensure the provision of quality rehabilitation services to individuals who had undergone amputation following the January 12th earthquake in Haiti.

Also in 2009, the CIR also developed online training modules focused on the following topics:

1. **Lower Extremity Anatomy-** Contains basic human anatomy, medical terminology, planes of the body, and osteology and myology of the lower extremity.

2. **Biomechanics** - Provides an overview of biomechanics of the foot, Newton's principles and they relate to lower extremity orthotics, friction, different types of levers and the physical effects of orthotic devices.

3. **Lower Extremity Pathology** - Provides basic information related to neuromuscular disorder such as Upper and Lower Motor Neuron Syndromes.

4. **Normal and Pathological Gait** – Explores the phases of normal and pathological gait are described in this module, postural changes and how these are influenced by body weight during stance phase. Also, the various phases of gait are explained and the role of ground reaction forces are included.

5. **Lower Extremity Terminology** - Allows students to learn the most common nomenclature used for different types of orthosis (based on the International Organization for Standardization - ISO) designed for the lower extremity, the basic components of lower extremity orthosis, suspension systems and the criteria

for their selection. The module also includes how conduct a physical evaluation of the patient and how to perform a muscle test.

6. **Patient Evaluation** - Provides basic information on how to use a variety of patient evaluation procedures and measurements techniques to determine the needs of the patient. Aspects such as how to develop an appropriate orthotic treatment plan, understanding the different types of disabilities and how to evaluate the condition of the patient and the range of motion of the lower extremities.

7. **Foot Orthotics (FO)** - Allows students to gain an understanding of the various classifications of foot orthosis, their design, and the materials used to fabricate them. Also covers aspects related to how to identify the bony prominences that are used as references for proper measurements and the procedure for taking measurements, casting, making modifications and fitting the devices.

8. **Ankle Foot Orthotics (AFO)** - Covers the various classifications of ankle foot orthosis, their design, and the materials used to fabricate them. As well as aspects related to how to identify the bony prominences that are used as references for proper measurements and the procedure for taking measurements, casting, making modifications and fitting the devices. The student will learn how to align the orthosis and how to evaluate its proper functioning.

9. **Clinical Considerations** - Provides an overview of orthotic considerations involving various designs of ankle foot orthosis for the treatment of individuals with neuromuscular deficiencies such as those produced by spinal cord injuries, strokes, or those caused in children with cerebral palsy.

10. **Overview of Knee Ankle Foot (KAFO) Components and Biomechanics** - Gives an overview of orthotic considerations involving various designs of the KAFO for the treatment of individuals with neuromuscular deficiencies. It provides the reader with a basic understand the parts and function of the KAFO, of the different designs and prescription considerations, of the associated pathologies, and of the biomechanical principles and alignment considerations.

11. **KAFO – Casting and Fabrication** - Gives the various classifications of knee ankle foot orthosis, their design, and the materials used to fabricate them. Also, covers aspects related to how to identify the bony prominences that are used as references for proper measurements and the procedure for taking measurements,

casting, making modifications and fitting the devices. The student will learn how to align the orthosis and evaluate proper functioning.

12. **Overview of Hip Knee Ankle Foot Orthosis (HKAFO), Hip Orthosis (HO), Knee Orthosis (KO) and Rotational Control Orthosis (RCO)** - Explores aspects related to the various lower extremity orthosis used at the level of the hip. Provides the students with an understanding of the components and biomechanics of the hip-knee-ankle-foot orthosis (HKAFO), and of the prescriptions and indications for Hip Orthosis (HO), Knee Orthosis, (KO) and Rotational Control Orthosis. Also covers aspects related to how to measure and fit to the patient a custom fitted HO's, KO's, and rotational control orthosis.

These training modules will be posted as Knowledge Centers (KCs) in the iCon Resource Center (iRC) to ensure that the information reaches as wide and varied an audience as possible.

In addition, during the current reporting period, the following training modules were adapted to ensure cultural appropriateness, expanded to include addition clinically-related information, and translated into Bosnian:

1. Disability and Rehabilitation - Includes basic information on how a rehabilitation clinics help coordinate the participation of the various specialists involved in the integrated rehabilitation process of an individual with a disability. Describes the major functions of rehabilitation clinic such as : coordinating the pattern of treatment and educating the involved staff and the patients.

2. Anatomy of the Spine – This training module contains basic human anatomy, and describes each region of the spine, its functions and characteristics and also includes basic information on the ligaments, vertebral bodies, and muscles.

3. Biomechanics of the Spine - Provides an overview of the vertebral bodies of the cervical, thoracic, and lumbar regions including the functions of each vertebral body, cervical spine, goniometry, and various movements in the planes and axes of the human body.

4. Pathologies of the Spine – This section describes common pathologies affecting the spine such as idiopathic and congenital scoliosis. It includes information on clinical manifestations, diagnosis, tests, and techniques used to measure the spinal curves and orthotic treatment. Other pathologies like kyphosis, spondylolisthesis, spondylolysis, Potts's disease, and common injuries are also included , as well as recommended interventions and treatment.

5. Cervical and Spinal Clinical Considerations – Provides recommendations for the use of cervical and spinal orthoses in the treatment of traumatic injuries and pathologies.

Includes biomechanical principles used to provide pain management and positional control, such as the principle of the three-point system.

6. Overview of Cervical & Spinal Orthotics – The goal of this section is to provide an overview of cervical and spinal orthotics. It includes the different categories used to describe the treatment of the cervical and spinal regions, and provides information on the type of spinal orthoses most commonly used to provide pain management, support, and motion control. It includes information on the designs and application of metal and plastic lumbosacral (LSO), thoracolumbosacral (TLSO), and cervico-thoracolumbosacral orthoses (CTLSO), and on how they are used to reposition the spine into a more anatomically correct alignment, as in the case of scoliosis.

7. Cervical & Spinal Orthotics Treatment – Provides information on how to fit a cervical orthosis and on how to make a custom fitted thoracolumbar sacral spinal orthosis (TLSO). Also provides a basic understanding of the cervical and spinal orthotics classification and their different designs and fitting principles, and information on how to identify the anatomical landmarks that are used as references for proper measurement and custom fabrication of a TLSO.

8. Anatomy of the Upper Extremities - This module provides an overview of the upper extremity anatomy that is used in the fabrication of an upper extremity orthosis. It describes the functions of the muscle groups, the nerves that innervate them, and facilitates the understanding of the changes in movement and of the type of assistance that the orthosis will provide to the patients, according to his/her capacity and/or needs.

9. Biomechanics of the Upper Extremities – This training module provides a basic understanding of the biomechanics of the upper extremity and of its applications in evaluation of a patient and in the manufacturing of an orthosis. It describes how to effectively apply biomechanical principles when evaluating a patient for an orthosis, and on how to identify anatomical structures. This section also provides an understanding of range of motion (ROM) of the upper extremities, and on how to achieve a functional ROM (not necessarily a full ROM).

10. Clinical Considerations - This module provides information about injuries and illnesses to support knowledge and understanding of the most common conditions that affect the body structures and function of the upper extremity. Musculoskeletal conditions and neurological disease can benefit from the timely indication of a properly manufactured orthotic device. Various injury types, including fractures, dislocations, sprains, tendinitis, and degenerative processes that can be caused by trauma, mechanical stress, disease, or aging joints can be seen in the upper extremity. Also, certain conditions of the nervous system can affect the functional level of the upper extremity. Fractures, joint disease, periarticular disorders (rotator cuff tear), central nervous system and peripheral nerve injuries are all described and discusses in this module.

11. Principles and Components – This module describes the different categories, and components of upper limb orthosis systems currently available and provides information

of whether their primary purpose is therapeutic or functional. It provides the necessary information to categorize upper limb orthosis by different pathologies (e.g., spinal cord injury, arthritis, trauma, head injury), joint encompassed (e.g., shoulder, elbow, wrist), or treatment objective (e.g., promote healing, prevent deformity, enhance function). It also explains how to categorize upper limb orthosis by static and dynamic, and subcategorize them as either functional of therapeutic.

12. Wrist Hand Orthosis - Provides information on how to cast, and fabricate a static wrist hand orthosis to support the wrist joint, maintain the functional arquitecture of the hand, and prevent wrist-hand deformities. This module also discusses the use of therapeutic attachments, such as metacarpophalangeal (MCP) extension stops, interphalangeal (IP) extension assists, and thumb extension assists.

D2: Continue to encourage the collaboration of Open Content methodologies to develop and disseminate materials

When the CIR organized the world's first distance learning course in prosthetics, in June 2001, it was not clear to many observers that a hands-on activity like Prosthetics and Orthotics could be taught by distributed learning. Since then, graduates of the CIR program have been certified by the International Society of Prosthetics and Orthotics and it is generally acknowledged that distance learning is not only a viable strategy for P&O education, but it may be the optimal one. Many humanitarian organizations in the field have learned that it is often easier to implement packaged training programs for under-skilled personnel, delivered via electronic media in the workplace, than it is to develop ad hoc training courses or send personnel off for years of dedicated schooling. Web-based Open Content provides an ideal framework for such development and activities may best be implemented within the context of a structured Community of Practice (CoP). The CIR's IDEAnet (International Disability Education Alliance) website, functioning as a CoP site, was the launching pad for CIR open content development and dispersing materials, both in the rehabilitation services community and the disability rights community. IDEAnet has a broad domain and purpose of encouraging collaborative projects and the exchange of ideas in order to generate strategies and innovations to improve the situation of persons with disabilities. IDEAnet serves as a central, consolidated resource for any professional interested in improving their capacity to assist persons with disabilities. Throughout 2006, promoting the use of IDEAnet was of great importance. The CIR participated in several events, including: the ISPO regional conference in Belgrade; the American Academy of Orthotists and Prosthetists Annual Meeting in Chicago; and the State of the Science Conference in Chicago. These provided excellent opportunities to orient many partners and affiliates in the Rehabilitation Services area with IDEAnet.

Also in this year the CIR determined that the formation of an Open Content Consortium to develop an International Model Curriculum presents the most cost-effective opportunity for the maintenance and development of high-quality educational materials in the area of prosthetics, orthotics, and rehabilitation. The CIR designed an online platform

on IDEAnet to facilitate content development, sharing, archiving, and dissemination. A proposed structure, including editorial board positions and content development guidelines, was drafted.

Following the successful pilot of Train-the Trainer- a program which enables administrators and direct providers of rehabilitation services to offer continuing education to their technicians-Healing Hands for Haiti decided to launch its first distance education course in transtibial prosthetics in Haiti. The Range of Motion Project (ROMP), another nonprofit enrolled in the Train-the-Trainer program, wished to implement an educational program based on CIR's model in Guatemala and Ecuador. Development of an Open Content model for the creation its educational content in prosthetics and implementation of Train-the-Trainer program was completed with these two partner organizations facilitating the delivery of prosthetics education in Haiti, Guatemala and Ecuador.

Throughout 2006 a number of project groups focusing on rehabilitation engineering began to use the IDEAnet site to collaborate. A group of wheelchair designers from around the world, with this support of USAID, used the IDEAnet website to develop and advance a universal set of wheelchair specifications to ensure that wheelchairs developed or funded by international aid dollars meet the minimum requirements of their users. Over 40 collaborators of the CIR's Rehabilitation Engineering Research Center used the IDEAnet website to discuss the needs and future for appropriate technologies in low-income countries, and Dr. Suzanne Olds of Northwestern University's Biomedical Engineering Department used the IDEAnet website to host an online community, and to mount a curriculum on Moodle so that teachers across the United States could implement a problem-based rehabilitation engineering course at their school.

In January of 2007, the CIR attended a three day meeting of the International Society for Prosthetics and Orthotics (ISPO) Working Group on Orthotics and Prosthetics E-Learning Network (OPEN) in Hong Kong. Attending the meeting were 16 representatives from universities around the world involved in distance learning who presented highlights of their programs. Topics of discussion included using distance learning for continuing medical/professional education; planning of a P&O distance learning program in mainland China; an overview of Norwegian telemedicine activities; and open content curriculum development in P&O. The CIR used this meeting as a forum to propose the formation of an International Model Curriculum. This proposed structure, including editorial board positions and content development guidelines, was well received.

In the summer of 2007 open content methodology was used to develop and refine course content for the training of Iraqi Physical Therapists, Rehabilitation Center Mangers and Hospital Based Physicians (Detailed in section C:D:2 of this report). Instructors collaborated using the CIR's online platform on IDEAnet to facilitate content development, sharing, archiving, and dissemination.

In 2008 the CIR explored two new methods of providing training materials pertaining to the CIR fabrication methods:

1-Distribution through the iCons in Medicine website: Using the iCons in Medicine website would allow the CIR to regain total control of the materials, and ensure that they are distributed properly. Due to the login process of the website and the option to create "Project Groups," the iCons website allows for the materials to be distributed openly, but only to those individuals for whom the information is appropriate (i.e., those who do not possess adequate training in the area). It is important that those gaining access to these training materials have an understanding of biomechanics and prosthetics fabrication and are licensed or certified to provide care in order to prevent possible injuries to patients due to poorly-fitted prostheses.

2- Distribution through the Open Prosthetics Project website: The Open Prosthetics Project (OPP), a notable online source for training materials related to prosthetic fabrication, appears in the first page of Google search results for the term "Prosthetics," and has a small but very dedicated established community of users.

Despite the benefit of its having an existing audience, using only the OPP website for dissemination of training materials has a number of drawbacks - the first being that the information provided is not always SCORM- compliant. While the information provided on the OPP website is often quite valuable, the manner in which it is presented[89] limits its application possibilities. It is also important to note that the information presented in a fully open manner without any limitation regarding who can access it. Thus anyone can download, adjust in CAD software, and submit materials from the OPP to a manufacturer. This has the potential to create a situation where individuals with limited or no training and/or understanding of the underlying biomechanics involved are attempting to fabricate prosthetic or orthotic devices and provide care.

After further evaluation it was decided to use the iCons in Medicine website. In 2009 the CIR initiated the development of an online "iCon Resource Center" (iRC) **(Appendix P)** to allow for the provision of training materials pertaining to the CIR prosthetic fabrication methods and as a portal to other materials in an Open Content Curriculum. The development of this new resource represented a shift away from more traditional forms of information dissemination towards a Knowledge Management system that integrates and supports strong Communities of Practice, and will enable the iCon program to fulfill its commitment to deliver quality medical knowledge to providers in remote and underserved regions internationally. Rather than imposing restrictions on access and treating course materials and knowledge as proprietary products, this Open Content initiative makes materials publicly available in the hopes of disseminating ideas and sharing knowledge and information more rapidly than would be possible in a closed environment. When content is shared in a Community of Practice or social network, the members of the community can work together to create, enhance, and adopt new materials more quickly and without requiring extensive monetary or personnel investment.

[89] Most frequently the information on the Open Prosthetics Project is posted in Wiki entries or as commentary in a web-forum, not in the form of training materials that are available for download.

The iRC functions as a directory that houses a collection of medical Knowledge Centers (KCs) and Tech Centers (TCs) built to empower healthcare professionals through the presentation of educational materials. The establishment of KCs is based on the 35 recognized Healthcare Specialties of the iCons in Medicine program .The number of KCs in any one Healthcare Specialty area is unlimited, and viewers may search for KCs by healthcare specialty, or by keyword or phrase. When searching on the iRC by healthcare specialty, the dropdown menu notes the number of KCs in the directory available in a specific specialty. If no KC exists in a specialty area, clicking on the specialty will display a message that indicates a KC in the specialty is not yet available, but offers the opportunity to create one or request that one be created. Each KC may contain a variety of types of information including: definitions, answers to frequently asked questions, clinical resources, expert videos, images, documents, abstracts, facts relevant to the health specialty, training modules, and course materials. Viewers also have the opportunity to post comments on and rate each KC. Knowledge Centers have the functionality and appearance of a "mini-website," each with its own personalized URL. This URL can be used to provide a direct link to the particular KC without requiring visitors to log in to the iCons in Medicine website and search the iRC. KC creators are responsible for the upkeep, content, and the materials uploaded to the KC, and a link to their personal iCon Membership page is provided within the KC. One must be a Member of the iCon Network to implement a KC, however, non-members worldwide in need of medical information can view, utilize, and rate KCs. Unlike the KCs, the Tech Centers (TCs) focus on specific appropriate telemedicine applications and will not necessarily need to be established within the 35 recognized health specialty areas.

In late 2010 through 2011 the incorporation of EMR capabilities into the iCons collaboration and teleconsultation environment, to allow patient information to be readily available by physicians and allow for the provision of improved care, was under consideration. A number of open source EMR systems have been considered, but to date no decision has been made to move forward with making this functionality available. Before this functionality can be added, a number of questions would first need to be addressed, including the data retention policy, confidentiality and security, HIPAA implications.

The two EMR applications which were investigated are described in the following paragraphs:

<u>OpenEMR</u>

The Open Electronic Medical Record application is a platform that supports medical practice management, electronic medical records, prescription writing and medical billing. OpenEMR also provides a robust security model, HIPAA compliance, and support for ANSI X12 and HL7. This is a full-feature application that allows for the management of all the functions around the operation of a medical practice/clinic. Thus, medical claims and accounts receivable are features of the application, along with a calendar for managing appointments, customizable forms for medical encounters, document management for electronic or scanner records, plus support for voice

recognition. OpenEMR also offers a web front-end for easy access from anywhere, through a browser.

OpenMRS

The Open Medical Record System is a software platform which enables users to design a customized medical record system. It is a platform that can support medical informatics since its concept is to limit the use of free text and use coded information. It is based on a concept dictionary which defines all diagnosis, tests, procedures, tests, drugs and other general questions and potential answers. Thus it enables a user to customize the system for different uses, since there is no direct dependence on actual types of medical information or specific data collection forms. OpenMRS can also support a number of simultaneous users, since it is a client-server application, as well as offering a web front-end, making it easily accessible through a browser.

Of the two, OpenEMR is a more full-featured application best suited for managing the activities of a medical practice/clinic. OpenMRS offers features which make it easier to support data collection and analytics on the collected data.

C. Research and Delivery of ADL

R1: Research and evaluate existing empirical literature of appropriate locales for online delivery of educational services.

While feelings of social isolation are common in individuals who are geographically separated, experts note that "technology continues to link diverse cultures by reducing temporal and spatial separation."[90] The use of computer-supported collaborative learning (SCCL) or Advanced Distributed Learning (ADL) can allow students to feel connected to their peers, as well as allowing them to control the speed of their learning, and ensure the connection between newly acquired information and previous knowledge.[91] Though the two modes of delivery are similar in some respects, where ADL focuses on the access to and individualization of materials, CSCL emphasizes the importance of supporting collaboration between students.

The use of synchronous and asynchronous modes of communication are common to both CSCL and ADL, and allow instructors to communicate with students without being constrained by time or space.[92] Additionally, advancements in information and communications technologies (ICT) have aided in the development of systems within which course content and materials can be posted online for retrieval, or distributed to students directly.[93] Online distribution of materials allows for reductions in costs associated with printing and reproduction, and frequently the only costs associated with ADL course materials is that of their initial production. A recent example of this type of

[90] Ferdig, et al. (2007).
[91] Liaw, et al. (2008)
[92] Riverin and Stacey (2008).
[93] Caswell, Tom; Henson, Shelley; Jensen, Marion; and Wiley, David (2008). Open Educational Resources: Enabling universal education. *International Review of Research in Open and Distance Learning*. 9(1): 1-11.

course delivery can be seen in the Chicago Public Schools' Additional Learning Opportunities (ALO) program in which an online portion was added to students' schedule, making it possible to provide additional educational material without adding personnel and printing costs.[94]

To ensure that materials provided through ADL are accessible to as wide an audience as possible, it is important that they be specified by the Sharable Content Objects Reference Model (SCORM). SCORM ensures that materials can be used, shared, and reused without requiring a standardized computer configuration, operating system, or browser. SCORM-compliant materials include metadata, which describes the content, ensuring that they can be easily identified.[95] Experts also note that materials intended for use online distribution to a disparate audience should be created with attention paid to a number of factors, including: 1. Dialog and Social Interaction Support (the ease with which commands can be executed), 2. Information Design (how easy to read and interact with a website is), 3. Navigation (the ease with which a user can find the information they are seeking), and 4. Access (requirements for using a website, this is particularly important if a site requires a high-bandwidth connection).[96]

R2: Conduct literature review and evaluation of cost-effective delivery options including those based on licensing, consulting, tuition, and train-the trainer methodologies.

According to recent study findings, the use of a distance learning approach to deliver educational materials can achieve similar results when compared to face-to-face models.[97] Research comparing one-on-one tutoring with classroom instruction found that student achievement showed a difference of two standard deviations in favor of tutorial instruction.[98] Fletcher, et al. note, however, that while this method is preferable, it is not possible to provide a human tutor to each student and maintain a cost-effective model. By employing technology as a means to deliver educational materials and tailoring the materials to suit the needs of the students,

By employing education technologies that allow materials to be tailored to suit the needs to students, a system similar to direct tutoring can be established while also ensuring that it is affordable and globally accessible. Studies assessing the costs needed to achieve a common instructional outcome found that the most cost-effective approach to delivering instruction were computer-based and peer tutoring. Though the results of this study, conducted by Fletcher, et al., examined tutoring by professionals, peer tutoring, reducing class size, increasing instructional time, and using computer-based instruction; findings

[94] City of Chicago Mayor's Press Office. "Mayor Daley, CPS Officials Announce Pilot Program To Add 90 Minutes Of Online Learning Time To School Day." Updated August 24, 2010. Accessed Online 9/15/2011 - http://mayor.cityofchicago.org/mayor/en/press_room/press_releases/2010/august_2010/0824_cps_additional.html

[95] Li, Qing; Lau, Rynson W.H.; Shih, Timothy K; and Li, Frederick W.B. (2008). Technology Supports for Distributed and Collaborative Learning over the Internet. *ACM Transactions on Internet Technology*. 8(2):10.

[96] Preece, Jenny (2001). Sociability and usability: Twenty years of chatting online. *Behavior and Information Technology Journal*. 20(5): 347-356.

[97] Li, et al. (2008).

[98] Bloom, B. (1984) as per Fletcher, J.D.,;Tobias, S.; and Wisher, R. (2007). Learning Anytime, Anywhere: Advanced Distributed Learning and the Changing Face of Education. *Educational Researcher*, 36(2): 96-102.

indicate that only a computer-based approach is cost-effective. Other studies indicate that a combination of peer tutoring and computer-based instruction is more beneficial to students than online instruction alone.[99]

Historically, the CIR has employed a "blended learning" approach to deliver training materials related to prosthetic and orthotic fabrication techniques. As ICT continues to advance, these courses employ more online delivery, and formal hands-on workshops can be phased out, thus reducing travel costs and other costs associated with workshops and lectures. Improvements to e-learning systems, including Moodle, WebCT, and Blackboard allow instructors to manage and deliver materials to students, while also simplifying the process of training students' progress and allowing students to access materials as their schedule permits.[100]

The iCons in Medicine program also relies on web-based interaction rather than face-to-face meetings to improve patient care. Telemedicine programs have been seen not only to improve healthcare outcomes, particularly for individuals in rural and underserved areas who might otherwise not have access to specialty care,[101] but also to reduce costs.[102] [103] Though the program is primarily concerned with communication between healthcare providers and specialty physicians via teleconsultation, all members of the iCons network are treated as peers with a common goal of sharing information and knowledge to ensure the delivery of specialty healthcare worldwide.

D1: Stage regional IDEAnet conferences and meetings of experts in disability and rehabilitation in the Western Balkans, the Middle East and other regions.

In war-torn countries, the number of people with disabilities and the demand for rehabilitation services increase at a much higher rate than the supply of trained professionals or access to appropriate technologies. In response to this need, in the Latin America and Balkan regions, the Center for International Rehabilitation (CIR) has successfully provided researchers with the necessary tools to identify the greatest need in their home country, and provided rehabilitation professionals with appropriate technologies to help war wounded victims and people with disabilities achieve their full potential. Today, CIR's international humanitarian network extends to people with disabilities in over 55 countries across 6 continents. Through educational programs and technology transfer initiatives, the CIR collaborates with a network of rehabilitation service providers to address the needs of individuals devastated by war and poverty. To date, more than 70 students from 30 rehabilitation centers in 6 countries have completed CIR's distance education program in prosthetics. Following its regional outreach strategy for building rehabilitation capacity and disability rights awareness, the CIR introduced its

[99] Fletcher, et al. (2007)
[100] Ibid.
[101] O'Toole, Molly. "Rural Americans face greater lack of healthcare access." *Reuters Online.* Updated July 27, 2011. Accessed online: 9/15/2011 - http://www.reuters.com/article/2011/07/27/us-rural-idUSTRE76Q0MJ20110727
[102] *American Academy of Neurology*. "Good News for Rural Stroke Patients: Virtual Stroke Care Appears Cost-Effective." Updated September 14, 2011. Accessed online: 9/15/2011- http://www.aan.com/press/index.cfm?fuseaction=release.view&release=982
[103] Editorial Staff. "CSC: Telemedicine could answer healthcare challenges." *CMIO*. Updated June 6 2011. Accessed online:9/16/2011 - http://www.cmio.net/index.php?option=com_articles&view=article&id=28115&division=cmio

training, technology development and transfer, and dissemination programs in the Middle East Region.

In 2007 the CIR conducted regional workshops to reach people's needs by building partnerships in disability and rehabilitation in the Middle East. The purpose of theses workshops was to transfer appropriate rehabilitation technologies and promote interaction between rehabilitation professionals, and people with disabilities; and to establish a regional platform to identify areas of interest and concern in the region, and provide solutions through the development of tools, core curricula, and strategic plans that address the needs of people with disabilities and the war-wounded population.

In the autumn of 2007 through early 2008, the CIR together with the University Clinical Center (UKC), in an alliance with the Republic of Iraq Ministry of Health, conducted training for rehabilitation professionals from Iraq in Tuzla, Bosnia. Detailed in section C:D:2 of this report.

In late 2007, CIR staff traveled to Amman, Jordan where they worked to establish new relationships with rehabilitation organizations, facilities and schools in the region. The CIR used this opportunity to introduce its technologies to various P&O clinics, such as The Royal Rehabilitation Centre, King Hussein Medical Center, Al Hussein Society, Higher Council for the Affairs of Persons with Disabilities and the Hashemite Charitable Society.

In May 2008, the CIR organized a hands-on workshop in Kabul that offered training for local practitioners on appropriate prosthetic technologies developed by the CIR. The purpose was to train several prosthetic technicians at the Kabul Orthopedic Organization (KOO). The KOO is the only Afghan non-governmental organization providing rehabilitation services to individuals with disabilities in Kabul. This workshop allowed the CIR to introduce its innovative technologies to prosthetists working in Kabul and it was well received by the KOO. Integrating these technologies will benefit the long-term sustainability and quality of services provided to the war wounded population in Afghanistan. While in Kabul, the CIR also met separately with representatives of the Afghanistan Ministry of Public Health, Kabul Medical University, and the USAID Office of Health, Population and Nutrition to expand the CIR's current technology transfer efforts through introducing the iCons in Medicine program.

In June 2008 the CIR worked in collaboration with the Al Hussein Society, Amman Jordan to conduct a meeting of concurrent technology transfer workshops regarding prosthetic rehabilitation and wheelchair manufacture. A plenary comprised of representatives from the World Health Organization, the UN Refugee Agency, the University of Jordan, and the King Hussein Royal Medical Services, were first addressed by Prince Mired Bin Raad Bin Zeid Al-Hussein, an active advocate for demining and rehabilitation in Jordan.

The workshops were aimed at transferring appropriate rehabilitation technologies, promoting interaction between rehabilitation professionals, and providing solutions

through the development of tools, core curricula, and strategic plans that address the needs of people with disabilities and the war-wounded population in the Middle East. This was achieved through lectures and hands-on training related to the CIR technologies and programs. Participants included a combined total of 29 practitioners from multiple clinics within seven Middle Eastern regions: Afghanistan, Egypt, Jordan, Iraq, Lebanon, Syria, and the Palestinian Occupied Territories. One workshop specifically concentrated on the transfer of prosthetic technologies developed by the CIR's Rehabilitation Engineering Research Center (RERC).

Prosthesists received training using the CIR's transtibial prosthetic fabrication system known as the Vacuum-Based Impression and Alignment System (V-BIAS) on locally identified amputee subjects who posed difficult cases. A complete CIR system was donated to each participating clinic to conduct a quality assurance follow-up study with patients in their own country. Physiotherapists and technicians received training on service provision for the CIR-Whirlwind adult wheelchair and the CHIQUI pediatric wheelchair; adjustable wheelchairs designed to meet a wide range of user needs. The workshop centered on aspects related to appropriate wheelchair provision including: assembly, assessment, fitting, user training, and follow-up. A total of 75 wheelchairs were donated by the CIR to the Al Hussein Society.

All attendees were also introduced to iCons in Medicine: a humanitarian telemedicine program that uses the Internet to connect health care providers in remote and medically underserved areas with a network of committed volunteer specialty physicians who act as consultants on difficult cases. This program expands treatment options for patients who otherwise would not have access to specialty care. At the conclusion of the week, the plenary reconvened and Princess Majda Raad Bin Zeid addressed the group and bestowed training certificates to all participants.

In 2009 the CIR built upon its existing relationship with the University Clinical Center Tuzla. Partnerships were established with the Association of Physiatrists from the Federation of Bosnia and Herzegovina (BiH) and with the Association of Physiatrists of the Republic Srpska. Through these relationships, the CIR contributed to the organization of the Third International Congress of BiH Physiatrists. The three-day Congress was successfully executed in October 2010 to assist international experts from Europe and the United States in the opportunity to exchange current scientific knowledge to improve the quality of life of individuals with disabilities in the region.

Coinciding with the Congress, was the First International Society for Prosthetics and Orthotics (ISPO) Conference, which the CIR helped coordinate. Topics for the Conference were: Functional Electrical Stimulation; Idiopathic Scoliosis: The importance of Progressive Orthotic Treatment; Prosthetic Post-Operative Care; and the Importance of P&O Education for Members of the Multidisciplinary Team.

D2: Deliver educational materials in post-conflict areas as ancillary funding permits.

The CIR has a long legacy of distance learning by providing upgrade training to prosthetic technicians working in clinics that serve war-wounded, landmine survivors, and other amputees. This unique program provides local health care professionals with the knowledge and expertise to address the ongoing rehabilitation needs of their patients. It uses a blended delivery approach that combines online instruction, weekly online chat-rooms with instructors, message boards for Q&A, weekly quizzes, hands-on workshops, case presentations, technical briefs, final theoretical exams and final practical exams. A Lower and Upper Extremity Prosthetics Course that began in early 2003, concluded in March 2006. The course included instruction in transtibial, transfemoral, transradial, transhumeral, ischial containment, partial foot, Symes, Chopart, and knee/hip disarticulation prosthetics.

In 2006 the Iraq war had taken a terrible toll on the country's civilian population and left many people with significant disabilities. As an organization founded to help people and countries rebuild after conflict, the CIR was dedicated to working with Iraqi health care professionals and the Ministry of Health to deliver the best possible care to the civilian war-wounded in Iraq. In October 2006, the CIR and the Republic of Iraq Ministry of Health formed an important alliance through which medical training would be provided to Iraqi physical therapists, rehabilitation center managers, and hospital-based physicians who provide care to the civilian war-wounded. The program, operated through the Ministry's Emergency Disability Project (EDP), combined academic course work with hands-on training. In September 2007, training of 66 Iraqi physical therapists and 15 rehabilitation center managers began at the University Klinical Center (UKC) in Tuzla, Bosnia where instruction was provided by professionals affiliated with the CIR and the UKC. Training for each group was carried out in four phases which included content adaptation, pre-delivery, delivery of the training, and post-delivery reporting and follow-up. This four-phase approach ensured that the content and program were effective and efficiently adapted to meet the training needs outlined in the Terms of Reference by the Iraqi Ministry of Health. The resulting content was made available in printed and electronic format (CD's), to the physiotherapists' and rehabilitation center managers' trainees to use during the training and also as future reference.

For several years the CIR has partnered with the UKC to implement distance learning programs on prosthetics with Initially all aspects of the program were handled by the CIR. In September 2007, the CIR was began work with the UKC on "Demining and Mine Victims Assistance" for Bosnia and Herzegovina through the recommendation of its Ministry of Health.

The third track of Iraqi hands-on training was conducted for Hospital Based Physicians (HBP) in Bosnia. This training took place in two sets of two-week trainings - the first in December, 2007 and the second at the end of February, 2008. A total of 16 Iraqi HBPs attended these sessions that focused on specialized content areas of rehabilitation: spinal, stroke and traumatic brain injuries, limb fitting and amputee, and general rehabilitation.

Open Content methodologies were employed during the development and refinement of course content for the training. Instructors were able to collaborate using the CIR's online platform on the IDEAnet website to facilitate content development, sharing, archiving, and dissemination.

In February 2009, the CIR visited the Centro Nacional de Ortopedia Técnica (CNOT) in Cuba where they were able to fit several patients with lower limb amputations and offer information and training to the local service providers. Utilizing several Hosmer components and the same casting system used for the transtibial amputees, the CIR was also able to fit a patient with a transradial amputation. During the visit, it was observed that the Cuban service providers had only a drawer of various hands and hooks, but not a complete compatible set of prosthetic components. Offering these providers web-based training on the CIR prosthetic technologies would prove invaluable. These techniques offer an opportunity for local manufacture of prosthetic components using local materials, allowing for significantly lower costs without any sacrifice of functionality.

In 2010 the CIR continued to work with the University Clinical Center Tuzla (UKC) to provide training and education to rehabilitation professionals in the Balkan region. The training program delivered during this period included courses on upper and lower extremity orthotics, as well as spinal and cervical orthotics. The training was delivered in a format that combined online components with hands-on practical workshops and evaluations. The result was the delivery of high-quality education for orthotic technicians and improved provision of services for landmine survivors and other individuals with disabilities. Three hands-on practical evaluations were organized and conducted in collaboration with the UKC, and a practical training session of a one-stage circumferential casting technique use to fabricate a Thoracolumbar Sacral Orthosis (TLSO), as well as the modification, fabrication and fitting process of the orthosis was organized and conducted at the UKC's Prosthetics and Orthotics Training Center in Tuzla. The CIR also furthered efforts to collaborate with the UKC to develop, refine, and deliver spinal and upper extremity training materials. A total of 13 training modules were delivered to 21 students from the region.

As part of the clinical training provided to the students and rehabilitation staff, several multidisciplinary clinical evaluations of children and adults with various musculoskeletal disabilities were organized during this period to help addresses questions and clinical consideration that the medical staff had regarding specific clinical cases. Physical therapists and physical medicine and rehabilitation staff were involved in the evaluations and members of the families of the people with disabilities interacted with CIR staff and technical consultants.

In 2011 the same program in the previous year was provided to 21 students in the Balkan region, but this time only two training modules. Upper Extremity Orthotics:
Module II Biomechanics of the Upper Extremities
Module III Clinical Considerations

In March of 2011, two representatives of the International Society for Prosthetics and Orthotics (ISPO) visited Tuzla to perform a consultation of the CIR/UKC distance-learning program. The consultants observed part of the final exams of the upper extremity orthotics module. They reported that even though the students in their daily practice get little experience with upper extremity orthotics, they showed good performance and were able to answer questions regarding the device they were fabricating. Furthermore, several of the students where interviewed by the ISPO evaluators on their experiences and perception of the CIR prosthetic program. According to their report, they all perceived the course as a positive experience, improving their knowledge and abilities in daily practice significantly. A follow up visit by ISPO is currently being planned.

Key Research Accomplishments

- Researched a system to track, collect and report on usage data from the IDEAnet site and Community of Practice
- Designed and developed a Web-based Knowledge Management platform to facilitate Virtual Communities of Practice focused on Rehabilitation Services, Disability Rights, and Clinical Care. The platform incorporates social design conceptual models and strategies along with relevant technologies for building effective Communities of Practice.
- Planned the IDEAnet Community of Practice website.
- Planned to piloted Train-the-Trainer model program with Range of Motion Project (ROMP) in Guatemala and Healing Hands for Haiti
- Development of an Open Content model of curriculum development in P&O
- Completed the design and development process for the iCon store-and-forward telemedicine application and accompanying website incorporating feedback from experts in rural telemedicine and usability.
- Development of iCon website, instructional materials, pilot study, and IRB protocol.
- Development of policies and procedures documentation and instructional materials for the iCons in Medicine program. This documentation includes: Service Agreement, Acceptable Use policy, General Rules, Privacy Policy, the Medical Handbook and quick start guides.
- Development of an outreach plan to recruit Volunteers to participate in the iCons in Medicine program.
- Development of the iCons in Medicine online resource center (a member-oriented website being developed in collaboration with the American Telemedicine Association and other partners) as an Open Content Curriculum.
- Development of iCons in Medicine program participation structure.
- Refinement of an outreach plan to recruit National Secretariats, Chapters, and Member Organizations to participate in the iCons in Medicine program.
- Planning of a daylong conference, entitled "Telemedicine Support for the Iraqi Health Sector: Building Bridges through Humanitarian Relief" that aimed at raising awareness of, and participation in, the iCons in Medicine Program, as well as addressing ways of offering assistance in Iraq.

- Development of iCons in Medicine program National Secretariat RFA.

- Investigation and Development of iCons in Medicine and IDRM Social Networking strategy.

- Researched the potential language barrier to expanding the audience of the iCons in Medicine program due to participation being limited to individuals with some level of fluency in English.

- Investigated the used of smart mobile devices for integration of a mobile application into the existing iConsult laptop/desktop application.

- Development of an online "iCon Resource Center" (iRC) hosted on the iCons in Medicine website, that will be established as a portal to materials in an Open Content Curriculum.

- Explored the possibility of using Open Educational Resources (OERs) to allow for the distribution of materials to a wide and varied audience. Maintaining a network of individuals who have been vetted to ensure their credentials are sufficient has resulted in the distribution of materials that are of high quality through the iCons in Medicine network and iRC.

- Developed a course comprised of 8 modules in the area of disability rights and human rights covering legal protections, disability rights research and monitoring, and rights promotion.

- Development of a special edition of the IDRM publication to document the history of the Convention on the Rights of People with Disabilities, which has an anticipated publication date , May 2012.

- Planned the training of 66 Iraqi physiotherapists, 15 Iraqi rehabilitation center mangers and 16 Iraqi hospital-based physicians Tuzla, BiH.

- Development of several online training modules in Prosthetics and Orthotics

- Investigated of the possibility of supporting a data collection/mobile health program pilot project in Kenya with the Field Epidemiology and Laboratory Program Alumni Association (FELP-AA).

- Researched and solicited outside firms to reconstruct the website as part of the overall effort to improve the quality of service, upgrade functionality, and simplify administration.

- Investigated the used of smart mobile devices for integration of a mobile application into the existing iConsult laptop/desktop application.

REPORTABLE OUTCOMES

- Completed the development of a Web-based Knowledge Management platform to facilitate Virtual Communities of Practice focused on Rehabilitation S ervices, Disability Rights, and Clinical C are. The platform incorporates social des ign conceptual models and strategies along with relevant technologies for building effective Communities of Practice.

- Created a Virtual Community of Practice Design Guide

- Launched the IDEAnet Community of Practice website

- Produced educational module set in disa bility and hum an rights developed and delivered to students in 13 EU countries.

- Publication and country launches of the IDRM Regional Report of Europe which covers 14 Countries in Europe.

- Created and launched the IDRMnet.org website.

- Utilized several social networking outlets to generate interest and encourage participation in the International Disability Rights Monitor (IDRM) project: Blogging, Facebook Twitter, and Videos

- Participated, as one of the few invitees to attend the actual signing of the Convention on the Rights of People with Disabilities (CRPD) by Ambassador Rice at the UN in New York City.

- Continued the utilization of several social networking outlets to generate interest and encourage participation in the International Disability Rights Monitor (IDRM) project: Blogging, Facebook, Twitter, and YouTube.

- Adapted the International Disability Rights Monitor (IDRM) research methodology to reflect the Convention on the Rights of People with Disabilities (CRPD).

- Established an iCons Teleconsultation Advisory Board composed of leaders in the telemedicine industry, to he lp create a volunteer suppor t network in conjunction with the iCons in Medicine program.

- Formalized program m embership structure: iCon International, National Secretariats, Chapters, Member Organizations, Volunteers, Requestors, General Members

- Finalized and posted online policy and procedure documentation and instructional materials for the iCons in Medicine program . This docum entation includes:

Service Agreement, Acceptable Use policy, General Rules, Privacy Policy, the Medical Handbook and quick start guides.

- Conducted of two successful beta tests prior to iCons in Medicine program launch.

- Ongoing refinement and design of the iCons in Medicine website and store-and-forward software application to improve usability. Refinement of the iConsult client-server application to enhance the functionality, usability, and aesthetics.

- Participated in continuing medical education events to introduce and promote iCons in Medicine to physicians.

- Orchestrated a daylong conference, entitled "Telemedicine Support for the Iraqi Health Sector: Building Bridges through Humanitarian Relief" that aimed at raising awareness of, and participation in, the iCons in Medicine Program, as well as addressing ways of offering assistance in Iraq. This conference served as the official launch of iCons in Medicine.

- Received substantial media coverage, including articles featured in *JAMA*, *The Chicago Tribune*, and a number of other publications, leading up to and following the official launch of iCons in Medicine.

- Launched recruitment strategy. Registered 11 Chapters, 134 Volunteers, 27 Member Organizations, 52 Requestors, 3 National Secretariats with 4 under review in the iCons in Medicine program. Continued growth and maintenance of the iCons in Medicine Membership. Collaborated with NAAMA and the iTAB to recruit National Secretariats

- Implemented and maintained Social Networking strategy, utilizing Facebook, Twitter, e-newletters, blogs and videos, to generate interest in the iCons in Medicine program and initiate communication and discussion among members. Over a 2 year period, sent 70 e-newsletters to over 725 healthcare professionals; Wordpress blog posts (one of three blog sites used) generated 25,471 views; acquired 2,555 Twitter followers and posted 1,411 tweets; and garnered 4,076 views on the You Tube Channel.

- Piloted Train-the-Trainer model program with Range of Motion Project (ROMP) in Guatemala and Healing Hands for Haiti, creating two additional country level training course in transtibial prosthetics.

- Created and implemented an Open Content model for the creation of educational content in prosthetics and implementation of Train-the-Trainer program with two partner organizations facilitating the delivery of prosthetics education in Haiti, Guatemala and Ecuador

- Presented an Open Content model of curriculum development in P&O at three day meeting of the International Society of Prosthetics and Orthotics (ISPO) Working Group on Orthotics and Prosthetics E-Learning Network (OPEN) in Hong Kong.

- Compiled and posted materials as a part of a collaborative webinar presentation by the CIR and the Northwestern University Prosthetics and Orthotics Center (NUPOC). These included documents on the CIR Casting System and other CIR technologies. This collaborative effort was aimed at encouraging the inclusion of appropriate CIR prosthetic technologies in the curriculum of prosthetic training and education facilities nationwide.

- Organized and executed the Third International Congress of BiH Physiatrists in coordination with the University Clinical Center Tuzla (UKC), the Association of Physiatrist from the Federation of Bosnia and Herzegovina (BiH), and the Association of Physiatrists of the Republic Srpska. During this Congress, the CIR helped to coordinate the First International Society for Prosthetics and Orthotics (ISPO) Conference in which international experts from Europe and the United States participated and exchanged current scientific knowledge to improve the quality of life of individuals with disability in the Balkan Region.

- Delivered successful workshops in Kabul, Afghanistan and Amman, Jordan aimed at transferring appropriate rehabilitation technologies, promoting interaction between rehabilitation professionals, and providing solutions through the development of tools, core curricula, and strategic plans that address the needs of people with disabilities and the war-wounded population in the Middle East.

- Delivered training to training to 66 Iraqi physiotherapists, 15 Iraqi rehabilitation center mangers and 16 Iraqi hospital-based physicians in conjunction with the University Clinical Center in Tuzla, BiH.

- Conducted a Hip and Knee Disarticulation prosthetic demonstration and hands-on practical evaluation in Tuzla.

- Provided upper and lower extremity and spinal and cervical orthotics training and education through online and hands-on practical workshops to rehabilitation professionals in the Balkan region.

- Organized and conducted a Lower Extremity Orthotics practical evaluation in Tuzla, the first of its kind in Bosnia

- Completed an educational module set in the area of Physical Therapy resulting in 490 pages of content covering: Limb fitting and amputee rehabilitation, Neurological rehabilitation, Pediatric rehabilitation and General rehabilitation.

- Delivered multiple online training modules in Prosthetics and Orthotics

- Adapted P&O training modules for cultural aspects, additional clinically related information, and translation into Bosnian.

- Tracked developments and trends to stay current by identifying and embracing those technologies that are widely adopted and stand to offer flexibility and enhanced capabilities to its membership of the program.

Conclusions

The Center for International Rehabilitation (CIR) conducts research, raises awareness, and promotes action to improve the quality and advancement of medical and rehabilitation services in remote and medically-underserved areas. It accomplishes this through innovative engineering projects, capacity-building education programs, interactive online tools, and human rights advocacy. Throughout the course of this grant, the CIR continued to utilize its experience distributing learning materials; conducting hands-on workshops aimed at transferring appropriate rehabilitation technologies; promoting interaction between rehabilitation professionals; and providing solutions through the development of tools, core curricula, and strategic plans that address the needs of people with disabilities, and the war-wounded population resulting in a significant record of involvement in issues related to health and the lives of people with disabilities internationally, successfully blending advocacy efforts with humanitarian programming to achieve notable victories in each area.

The CIR harnesses the power of the Internet to deliver world class medical education to workers in clinics and hospitals in post-conflict, remote and/or medically underserved areas of the world. The CIR training materials range from workbooks to online multimedia materials incorporating videos and graphics. These educational programs and workshops promote the highest quality of care and encourage professional development among local workers. One of these virtual classroom programs is Train the trainer which is designed to provide educational materials and expertise to other non-profit organizations so that they can upgrade training to local prosthetic technicians who do not have the means of returning to school for such training. Another virtual classroom is the CIR's Distance Learning which is designed to train prosthetic technicians in countries that are recovering from conflict. Since its inception, graduates of the CIR program have been certified by the International Society of Prosthetics and Orthotics and it is generally acknowledged that it is not only a viable strategy for P&O education, but it may be the optimal one. Through these training efforts, the CIR hopes to ensure that the needs of people with disabilities are met in areas worldwide where access to quality medical care and rehabilitation services are limited.

With the adoption of the International Convention on the Rights of Persons with Disabilities (CRPD), the CIR's International Disability Rights Monitor (IDRM), trained 14 Researchers through a new online distance learning course and added to its landmark

series of reports by publishing the Regional Report of Europe. This, along with the previous reports, goals, researchers and convention information was showcased on a newly created website. In recognition of its contributions, the CIR/IDRM participated, as one of the few invitees to attend the actual signing of the CRPD at the UN in New York City. Research methodology was adapted to reflect the CRPD and the training program update will be completed by early 2012. An IDRM publication capturing the evolution and inception of the CRPD is planned to be published in spring 2012. The CIR intends to present this special edition IDRM publication to the Secretary of State as a record of the process that led to the adoption of the Convention.

Developed and launched during the course of this grant, the CIR;s iCons in Medicine is a global telehealth and humanitarian medicine volunteer alliance that uses innovative applications of technology and social networking tools to improve healthcare delivery in remote and medically-underserved areas, and reduce global health disparities. The implementation of Social Media lead to an exponential increase in awareness and interest in the program. Over 725 healthcare professionals receive a bi-monthly e-newsletter from iCons in Medicine, and these individuals and other interested parties respond to materials distributed through Facebook, Twitter, blogs, and videos posted online. In just two years of utilizing social networking, the Wordpress blog (one of three blog sites used) has generated 25,471 views, Twitter has 2,555 followers and has posted 1,411 tweets, and the YouTube Channel has had 4,076 views. Program membership includes over 400 individuals in 12 countries around the world. These individuals represent 35 academic and medical centers, and include renowned experts in telemedicine, e-health, and global health disparities. Over 130 physicians with expertise in 35 medical are available to respond to teleconsultation requests from individuals representing over 20 organizations in 10 countries. These external social networking outlets have also been utilized to share information about the IDRM project, and to generate interest and encourage participation it. Information posted online by the CIR is frequently reposted by others, further increasing the audience that is exposed to these materials. It is anticipated that through the continued use of social networking and ongoing refinement of the iCons in Medicine website and software application, it will be possible to ensure a strong and sustainable network. Through this network, it will be possible to share and disseminate new knowledge, information, and ideas, and to ensure the provision of quality health services worldwide through telemedicine

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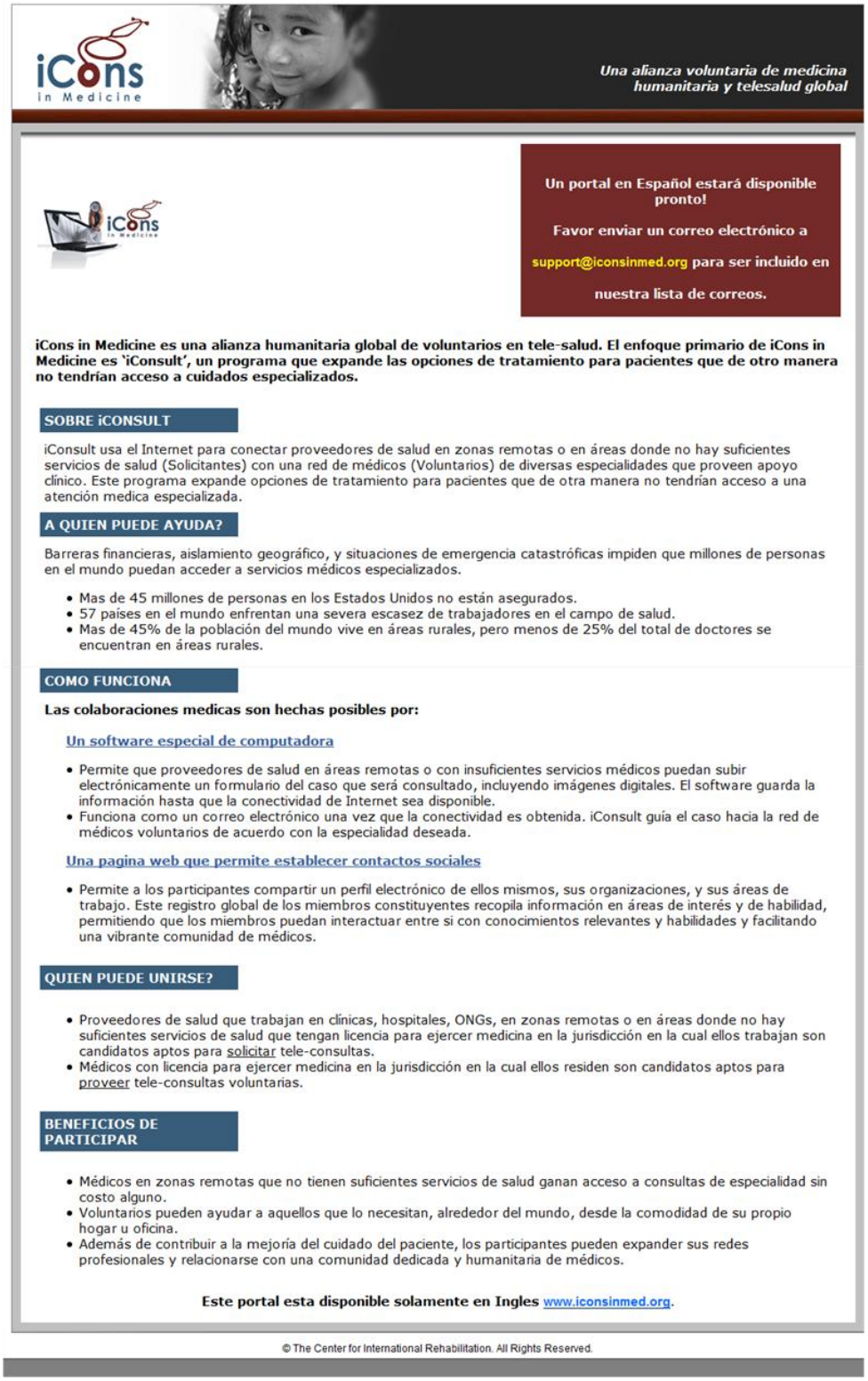
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Appendix A



iCons in Medicine

Una alianza voluntaria de medicina humanitaria y telesalud global

Un portal en Español estará disponible pronto!

Favor enviar un correo electrónico a support@iconsinmed.org para ser incluido en nuestra lista de correos.

iCons in Medicine es una alianza humanitaria global de voluntarios en tele-salud. El enfoque primario de iCons in Medicine es 'iConsult', un programa que expande las opciones de tratamiento para pacientes que de otro manera no tendrían acceso a cuidados especializados.

SOBRE iCONSULT

iConsult usa el Internet para conectar proveedores de salud en zonas remotas o en áreas donde no hay suficientes servicios de salud (Solicitantes) con una red de médicos (Voluntarios) de diversas especialidades que proveen apoyo clínico. Este programa expande opciones de tratamiento para pacientes que de otra manera no tendrían acceso a una atención medica especializada.

A QUIEN PUEDE AYUDA?

Barreras financieras, aislamiento geográfico, y situaciones de emergencia catastróficas impiden que millones de personas en el mundo puedan acceder a servicios médicos especializados.

- Mas de 45 millones de personas en los Estados Unidos no están asegurados.
- 57 países en el mundo enfrentan una severa escasez de trabajadores en el campo de salud.
- Mas de 45% de la población del mundo vive en áreas rurales, pero menos de 25% del total de doctores se encuentran en áreas rurales.

COMO FUNCIONA

Las colaboraciones medicas son hechas posibles por:

Un software especial de computadora

- Permite que proveedores de salud en áreas remotas o con insuficientes servicios médicos puedan subir electrónicamente un formulario del caso que será consultado, incluyendo imágenes digitales. El software guarda la información hasta que la conectividad de Internet sea disponible.
- Funciona como un correo electrónico una vez que la conectividad es obtenida. iConsult guía el caso hacia la red de médicos voluntarios de acuerdo con la especialidad deseada.

Una pagina web que permite establecer contactos sociales

- Permite a los participantes compartir un perfil electrónico de ellos mismos, sus organizaciones, y sus áreas de trabajo. Este registro global de los miembros constituyentes recopila información en áreas de interés y de habilidad, permitiendo que los miembros puedan interactuar entre si con conocimientos relevantes y habilidades y facilitando una vibrante comunidad de médicos.

QUIEN PUEDE UNIRSE?

- Proveedores de salud que trabajan en clínicas, hospitales, ONGs, en zonas remotas o en áreas donde no hay suficientes servicios de salud que tengan licencia para ejercer medicina en la jurisdicción en la cual ellos trabajan son candidatos aptos para solicitar tele-consultas.
- Médicos con licencia para ejercer medicina en la jurisdicción en la cual ellos residen son candidatos aptos para proveer tele-consultas voluntarias.

BENEFICIOS DE PARTICIPAR

- Médicos en zonas remotas que no tienen suficientes servicios de salud ganan acceso a consultas de especialidad sin costo alguno.
- Voluntarios pueden ayudar a aquellos que lo necesitan, alrededor del mundo, desde la comodidad de su propio hogar u oficina.
- Además de contribuir a la mejoría del cuidado del paciente, los participantes pueden expander sus redes profesionales y relacionarse con una comunidad dedicada y humanitaria de médicos.

Este portal esta disponible solamente en Ingles www.iconsinmed.org.

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Appendix B

Making the world a healthier place

Teleconsultation Advisory Board

Principle Investigator: William K. Smith, MD

Chair

Jay H. Sanders, MD, FACP, FACAAI

Dr. Sanders is President and CEO of The Global Telemedicine Group, Professor of Medicine at Johns Hopkins University School of Medicine (Adjunct), and a founding board member of the American Telemedicine Association—where he serves as President Emeritus. After Dr. Sanders earned his medical degree from Harvard Medical School Magna Cum Laude, his professional career has involved teaching, patient care and health care research, along with more than 30 years experience in the field of telemedicine. He has served as a medical consultant to NASA, the U.S. Army and the World Health Organization, and during the Clinton Administration he directed the U.S. telemedicine initiatives to the G-8 nations.

Medical Director

Ronald Merrell, MD, FACS

Dr Merrell is professor of surgery and director of the Medical Informatics and Technology Applications Consortium at Virginia Commonwealth University. He is an editor-in chief of Telemedicine and e-Health and author of some 300 publications in the field of medicine and technology. Dr Merrell trained in surgery and biological chemistry at Washington University in St Louis. Dr Merrell is an endocrine surgeon and has held the chair in surgery at Yale and at Virginia Commonwealth University. Dr Merrell has a long history as advisor and investigator for NASA and the Army. His research work has emphasized management of medical events at a distance including extreme environments.

Members

Dale C. Alverson, MD

Dr. Alverson is a Professor of Pediatrics and Regents' Professor on faculty at the University of New Mexico and the Medical Director of the Center for Telehealth and Cybermedicine Research. In that role, he has been involved in the planning, implementation, research and evaluation of Telemedicine systems for New Mexico primarily serving its rural communities. He is a founder of the New Mexico Telehealth Alliance and has been appointed by the Governor as a commissioner on the New Mexico Telehealth Commission. He is on the Boards of the American Telemedicine Association (ATA) and the Center for Telehealth and e-Health Law (CTeL). He is also a member of the Four Corners Telehealth Consortium, and has participated in international Telehealth projects, particularly with Latin America.

Peter B. Angood, MD FRCS(C) FACS FCCM

Dr. Angood is the inaugural Chief Patient Safety Officer and a Vice President for The Joint Commission, overseeing the annual development of the National Patient Safety Goals and numerous other safety activities. Dr. Angood is also Co-Director of the Joint Commission International Center for Patient Safety and a lead for the World Health Organization's Collaborating Center for Patient Safety Solutions, a component of the multifaceted WHO Alliance for Patient Safety. Previously, Dr. Angood accrued 25 years of academic experience as a Trauma Surgery and Critical Care Medicine specialist in top-tier institutions and is a fellow of the Royal College of Surgeons (Canada), the American College of Surgeons and the American College of Critical Care Medicine. He has numerous leading-edge research interests, is the author of over 120 publications and has delivered over 300 invited presentations.

Richard Bakalar, MD

Dr. Bakalar, who previously served as President of the ATA, currently serves as the Chief Medical Officer on IBM's Global Healthcare and Life Sciences Industry team. He is the senior clinical advisor to the US and Canadian Business Consulting Services Healthcare teams which have hosted informational workshops and healthcare seminars. Dr. Bakalar joined IBM Healthcare and Life Sciences team after 26 years service in the US Navy Medical Corps. He has extensive experience in clinical medicine, diagnostic imaging, military medical flight operations, and applied information technology. He is board certified in both Internal and Nuclear Medicine. Dr. Bakalar served as the Executive Assistant to Navy Surgeon General for Global Telemedicine initiatives.

Sam Burgiss, BS, MEE, PhD

Sam Burgiss, PhD, Professor of Radiology, University of Tennessee Graduate School of Medicine, served as Director of the UT Telehealth Network for eleven years providing over 100,000 patient encounters to the population of East Tennessee. In the national arena, his involvement includes serving on the Board of Directors for the American Telemedicine Association and serving as Chair of the ATA Home Telehealth Special Interest Group. He is the co-chair of the ATA Business and Finance SIG, is a member of the ATA Public Policy Committee, and received the 2004 ATA President's Award for Leadership. He has contributed to legislation for telehealth and testified before the US Senate. Dr. Burgiss received his BS, MEE, and PhD degrees in Electrical Engineering from North Carolina State University. He holds two patents and has authored over 140 invited lectures, papers, and book chapters.

Conrad Clyburn, MS

Mr. Clyburn is the Director of Program Integration and Planning for the U.S. Army Medical Research and Materiel Command, Telemedicine and Advanced Technology Research Center (TATRC) located at Fort Detrick, Maryland. In that capacity, he was responsible for life cycle management of over 500 medical research and development programs, with a 2005 budget of approximately $300 million. Mr. Clyburn has served on the Board of Directors/Advisors of the American Telemedicine Association, the International Mobile Health Association, the NASA Medical Informatics Technology Applications Consortium at Virginia Commonwealth University and numerous military Product Line Reviews and Integrated Research Teams.

Charles R. Doarn, MBA

Mr. Doarn serves as the Executive Director of the U niversity of Cincinnati's Center for Surgical Innovation, where he is also a Research A ssociate Professor of Surger y and Biomedical Engineering. Prior to joining the facult y in Cincinnati, Mr. Doarn served as the Executive Director and co-principal investigator for NASA's Research Partnership Center for Medical Informatics and Technology Applications (MITAC) at Virginia Commonwealth University , Mr. Doarn authorized NAS A's strategic plan for Tele medicine. Mr. Doarn served on the Boar d of Directors for the ATA as well as Se cretary, Treasurer, and chair of the International Specia l Interest Group. Mr. Doarn also serves as an Editor-in Chief of the Telemedicine and E-Health Journal.

Joseph Kvedar, MD

Joseph C. Kvedar, M.D., is Founder an d Director of the Center for Connected Health, a division of Partners Healthcar e that is appl ying communications technology and online resources to improve access and delivery of quality patient care. Dr. Kvedar is internationall y recognized for his leadership in the field of connected health. He is a past Pres ident and board member of the American Telemedicine Association (ATA) and co-ed itor of *Home Telehealth: Connecting Care within the Community*, the first book to report on the applications of technology to deliver quality healthcare in the hom e. Dr. Kvedar i s also a boar d-certified dermatologist and Vice-Chai r of Dermatology at Harvard Medical School.

Rifat Latifi, MD, FACS

Dr. Latifi is a Professor o f Clinical Surgery at the University of Arizona, Vic e Chairman of the Department of Surger y for International Rela tionship, and Director of Southern Ar izona Telemedicine and Telepre sence Program (SATT) at the Univer sity Medical Center, Tuc son Arizona. In addition to be director, he de veloped the SATT Program , which provides a live consultation link -- including state-of-the-art videoconferencing, telemetry, digital X-rays and ultrasound -- between the trauma doctors at UMC and rural emergency rooms doctors and nurses in the southern section of the state to assist in tr auma care of injured and critically ill patients. He is also the As sociate Director of Arizona Telemedicine Program where he leads Telesurgery and International Affairs for this program . Dr. Latifi is a graduate of Medical Facult y in Prishtina, Kosova. He has a president of International Virtual e-Hospital Foundation.

Arnauld Nicogossian, MD

Dr. Nicogossian heads the Office of International Medical Policy at the School of Public Policy at George Mason University in Fairfax, Va. He has been Senior Advisor to the NASA Administrator for agency-wide issues related to health care provisions and aerospace medicine and has held increasingly responsible positions in NASA research and development areas for more than 30 years. He was named Associate Administrator for Life and Microgravity Sciences and Applications in May 1996, and has contributed significantly to the NASA mission of ensuring crew health in human exploration missions. He served as the lead physician for NASA's first international human space flight mission, the Apollo-Soyuz Test Project.

Max Stachura MD

Dr. Stachura was Endocrinology Section Chie f at the Medical College of Georgia, Augusta, from 1981 until he becam e Director of the Center for Telehealth and Georgia Research Alliance Eminent Scholar in Te lemedicine in 1996. He continues his endocrinology practice with a sub-specialty focus in neuroendocrinology. Under his

direction the Georgia Statewide Telemedicine Program grew to deliver more than 2000 specialty consultations per year. That statewide program has now been subsumed under the Georgia Technology Authority and WellPoint, Inc., allowing the Center and Dr. Stachura to focus on telehealth research, services development, and consultation activities. In 2000, he was appointed to the Board of Directors of the Alliance for Public Technology and served two terms as its president in 2005 and 2006.

Richard Stahl

Dr. Stahl is the Vice President, Ambulatory Services Division, Yale-New Haven Hospital and Clinical Professor of Surgery, Yale University School of Medicine. He has administrative responsibility for Yale-New Haven's free standing surgery, endoscopy, radiology, stereotactic radiosurgery, and subacute care facilities. Dr. Stahl practices Plastic Surgery and is Board Certified in both Plastic Surgery and General Surgery. He received his M.D. degree from Vanderbilt University School of Medicine, an M. B.A. from the University of New Haven, and a Bachelor's degree in Physics from Emory University.

Mark VanderWerf

Mr. VanderWerf founded, AMD Telemedicine which has over 5000 installations in over 275 telemedicine programs in 68 countries. He joined American Medical Development as a Vice President in 1991 where he was instrumental in changing the Company's focus from traditional medical products to telemedicine. In 1994 he became President changing the name to AMD Telemedicine. Prior to AMD, Mr.VanderWerf was a New Ventures Manager for Digital Equipment Corporation, also serving as an internal consultant and an international programs manager. Mr.VanderWerf is the 2006 recipient of the ATA Industry Council Leadership Award and the 2003 recipient of the New England Business and Technology Leadership award as among the top ten technology executives in the region. He is a member of the Board of Directors of the American Telemedicine Association and a founding Board of Directors member of the International Society for Telemedicine and eHealth.

Ronald Weinstein, MD

Dr. Weinstein is the founding Director of the Arizona Telemedicine Program at the University of Arizona Health Sciences Center in Tucson. The Arizona Telemedicine Program, includes a large statewide award-winning multispecialty telemedicine practice, and the Arizona Telemedicine Training Center. Currently, the program provides teleconsultations in 61 subspecialties, and has provided over 600,000 teleconsultations including teleradiology. He received his M. D. degree from Tufts University School of Medicine and did his residency and fellowship training in pathology at the Massachusetts General Hospital and Harvard.

Appendix C
Quick Start Guide for Volunteers



Quick Start Guide: Volunteer

Enrolling as a Volunteer

1. Begin by going to http://www.medicons.org in your Web browser.
2. From the Welcome to iCons in Medicine page, click the following link:
   Join iCons in Medicine
3. Follow the directions to register a "General Member" and submit the form.
   Note: Make sure to fill out required fields, and read and check the following:
   - *☑ I have read and agree with the terms of the Service Agreement (Service Agreement).
   - *☑ I have read and agree with the terms of the Acceptable Use Policy (Acceptable Use Policy).
4. Once submitted, you will see "Registration Success!" At this stage you have two options:
   A) You can personalize your account information, or
   B) You can register as an iCons in Medicine Volunteer by selecting: Become an iCon Volunteer
5. Select which chapter you wish to join, using the drop-down menu:

   Join an existing chapter below.
   Top of Form

   Join this Selected Chapter
6. Complete the form to register as an iCons in Medicine member and submit.
   Note: Make sure to fill out required fields, and read and check the following:
   - *☑ I have read the above affirmation and agree to the content therein.
7. "Registration Success," will appear in the next window.
8. You will receive an e-mail welcoming you to iCons in Medicine. You are now able to access profiles, chat rooms and forums by clicking on the link in the e-mail.

(Please note: At this time you are not able to accept or make consults. Your enrollment for participation with iConsult is currently being reviewed by your Chapter- iCon Chapter. You will receive an e-mail notification of you approval status.)

1

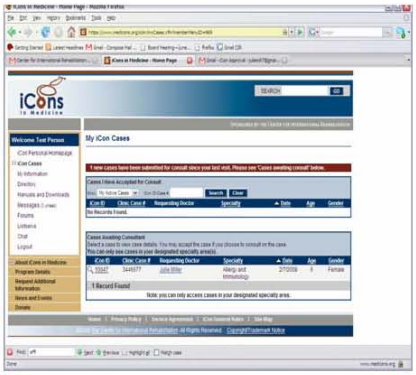
Receiving and Consulting on Cases: iConsult

Once approved by your chapter, you will receive an e-mail stating:

"Your enrollment for participation in the iConsult program as a Volunteer has been approved by your Chapter—(name of chapter). You are now able to accept and respond to requests for consults."

❶ Follow the link in the e-mail, or simply log in to **http://www.medicons.org** using your username and password. Go to your "iCon Personal Homepage."

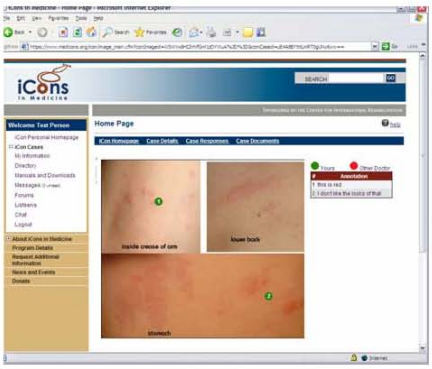
❷ To consult on a case, select "iCon Cases" on the left toolbar



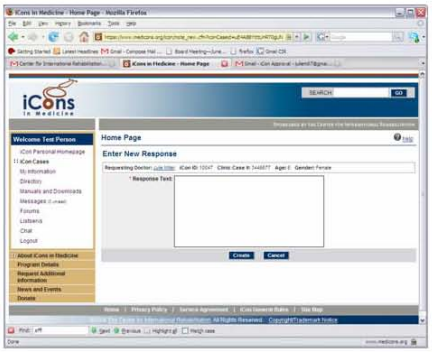
- Once on the "iCon cases" screen, you will see two different categories: 1) "Cases I have Accepted to Consult" and 2) "Cases Awaiting Consult"
- If a Requestor has submitted a case to your specialty, a case will appear under the "Cases Awaiting Consult"
- To view the cases, select the magnifying glass icon located next to the iCon ID



- This page contains the "iCon case details" and provides the case details
- At the top of the page, you will see the options: "Case Responses" and "Case Documents." If the Requestor has added additional information on his/her case, it will appear in these fields
- If you wish to accept this case, select the "Accept Case" tab. If you do not wish to accept the case for consult, simply go back to iCon Cases and browse for a different case.



- To respond to the case, you must first "accept" in which you agree to respond to the case in 48 hours.
- If the case has images, you can click the image for review. You can manipulate the size of the image by selecting the zoom function
- Click anywhere on the image to add an annotation. A box will appear where you may enter the annotation text.
- When the requestor opens the case on their computer, they can see your annotations.



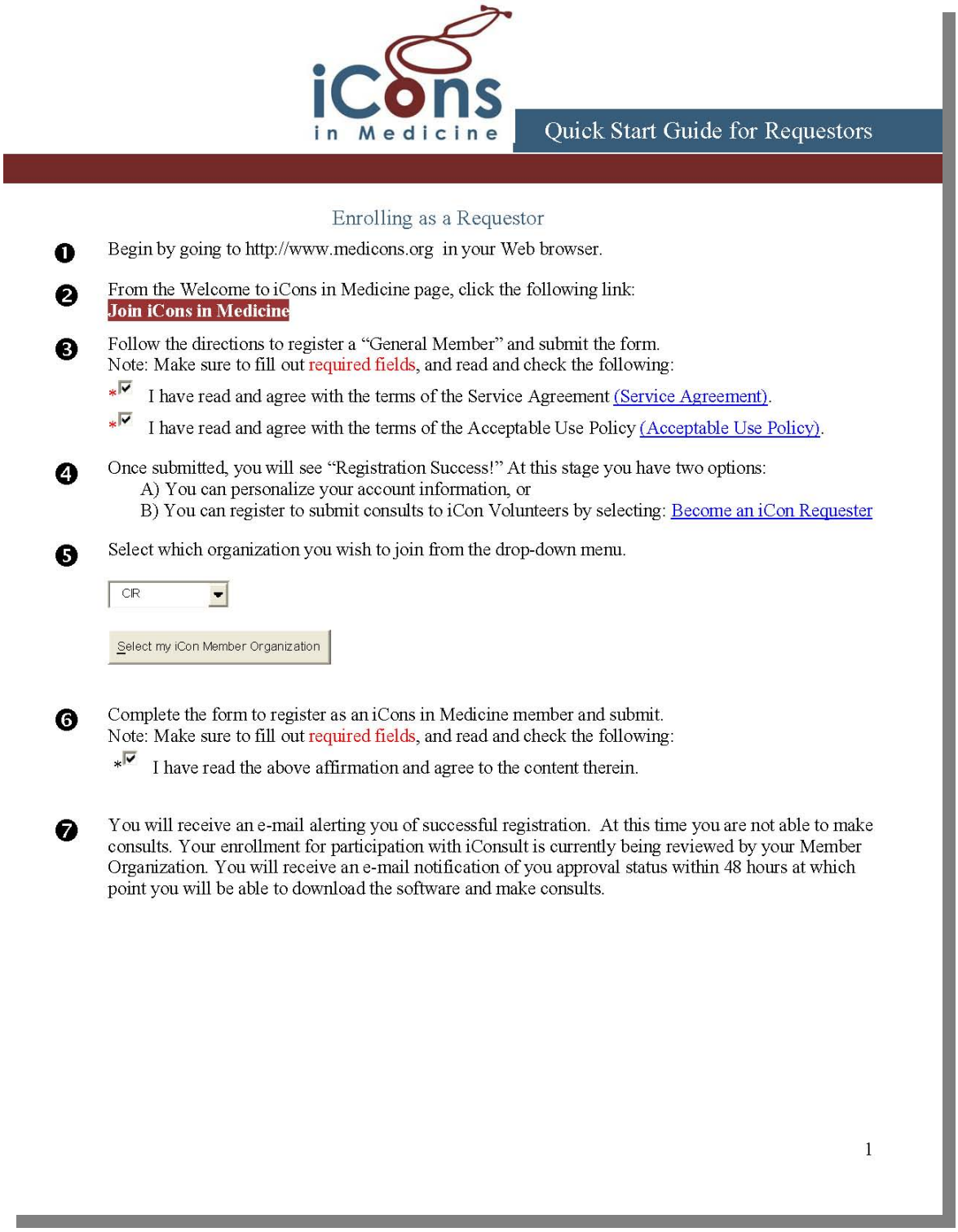
- To respond to the case, select the "Case Responses" tab at the top of the screen
- Then select "New Response"
- Once you have entered in your response, select "Create."
- At this stage, your response has been sent to the requestor

- You may consult on as many cases as you wish. Cases you have accepted will be listed under "Cases I have accepted for consult" under the "My Cases" link from your iCon home page.
- You will receive an e-mail notification if there is new activity on any cases you have accepted for consult. This will prompt you to log into iCons in Medicine to review new entries.

For additional technical support, email support@medicons.org

3

Quick Start Guide for Requestors



Enrolling as a Requestor

1. Begin by going to http://www.medicons.org in your Web browser.
2. From the Welcome to iCons in Medicine page, click the following link:
   Join iCons in Medicine
3. Follow the directions to register a "General Member" and submit the form.
   Note: Make sure to fill out required fields, and read and check the following:
   - *☑ I have read and agree with the terms of the Service Agreement (Service Agreement).
   - *☑ I have read and agree with the terms of the Acceptable Use Policy (Acceptable Use Policy).
4. Once submitted, you will see "Registration Success!" At this stage you have two options:
   A) You can personalize your account information, or
   B) You can register to submit consults to iCon Volunteers by selecting: Become an iCon Requester
5. Select which organization you wish to join from the drop-down menu.

   CIR

   Select my iCon Member Organization
6. Complete the form to register as an iCons in Medicine member and submit.
   Note: Make sure to fill out required fields, and read and check the following:
   - *☑ I have read the above affirmation and agree to the content therein.
7. You will receive an e-mail alerting you of successful registration. At this time you are not able to make consults. Your enrollment for participation with iConsult is currently being reviewed by your Member Organization. You will receive an e-mail notification of you approval status within 48 hours at which point you will be able to download the software and make consults.

1

Downloading and installing the iCon Software: iConsult

Log in to **http://www.medicons.org** using your username and password. Click on **"Manuals and Downloads"** from the menu on the left. Download the software from the link labeled iCons in Medicine Installer and save it to your desktop.

Double-click the iCon_Installer icon from your desktop and follow the prompts to install the software.

Once installed, complete the steps below to activate the software on your computer:



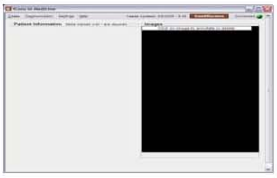
- Launch the iCon Software. If this is the first time you are using the software, you must select "Click here to activate this application with your 'iCons in Medicine' registration information." to use the software on your computer.
- If you have already completed this process the first time, log-in with your username and password.



- Agree to the Terms and Conditions of Use.
- Click Continue



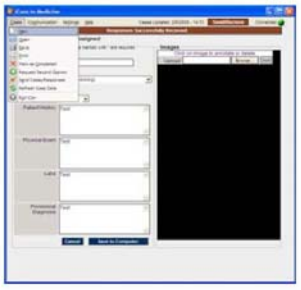
- Enter your username and password.
- Click Continue to register the software on your computer.



- You have now successfully setup the iCons in Medicine software and are ready to begin entering case information.
- See the next section of the guide for information on creating a new case for consult within the software.

iCons in Medicine

Submitting Cases for Consult



- To start a new case, select Cases → New from the top menu.
- Enter a Clinic Case Number. You may enter anything you wish for the case number, but make sure it is a format meaningful to you. This will be how your case is identified for you moving forward, so it should be something descriptive enough for you to identify.
- Fill in all case information and click Save to save your case information.
- At this point you may either Send/Receive your case information if you have a working internet connection and want to submit your case for consult, or you may upload images or documents to your case.



- Please note that YOU MUST SAVE YOUR CASE INFORMATION BEFORE YOU CAN ADD AN IMAGE. Image functionality will not work until you have saved your case information for the first time.
- To add an image to your case, select Browse underneath Images to locate the image on your computer you wish to upload to your case. Once you have located the image, click Add to attach the image to your case.
- You may double-click an uploaded image to edit the image, delete it, or create annotations to the image.



- Communications between you and the consulting physician will take place in the Communications section of the software. Access this section be clicking Communications → View all Messages.
- From here you will see messages sent from both you and the Consulting physician.



- To create a new message, select Compose New Message, enter your message, and click Create Message.
- Note that you must Send/Receive all information with an internet connection before messages will be sent to the Consulting physician.

3

iCons in Medicine

Other Features of Submitting a Case

Send/Receive Information

The iCon software allows you to work offline when you do have a working network connection. In order to transmit case information, send communications, and receive communications from consulting physicians, you must click the Send/Receive button at the top of the software when you have a working network connection.

Requesting a second opinion

If you are not satisfied with the consult provided by the consulting physician, you may request a second opinion on your case. The original consulting physician will not know that you have made this request.

To request a second opinion:

- Open the case
- From the top menu select Cases → Request Second Opinion

You case will now be back in the queue to be picked up for consult by a different consulting physician.

E-mail notifications

You will receive e-mail notifications when:

- Your request to become a Requestor and submit cases for consult has been approved by your member organization
- A case you have submitted has been accepted by a consulting physician
- A consulting physician has created a new communication on one of your cases

To view new messages on your cases, you must have a working Internet connection and Send/Receive information to see new communications from consulting physicians.

For additional technical support, email support@medicons.org

4

Appendix D

Service Agreement, Acceptable Use policy, General Rules, Privacy Policy and the Medical Handbook

Service Agreement

Prior to enrolling in the service as a Member of any degree, you must agree to the following terms and conditions. You may accept these terms and conditions by clicking on the "I Accept" button at the conclusion of the terms and conditions. You agree that you have read, understand and agree to be bound by this contract. If you do not wish to agree to this contract, do not access or use any part of this website.

1. What the Contract Covers.

This is a contra ct between you an d the Inte rnational Consultants in M edicine (ICON). Sometimes the Internatio nal Consultants in M edicine is referred to a s "ICON", "we," "us" or "our". This contract applies to any ICON or iCons in Medicine software, products or services, including updates that you use while thi s contract is in force. All of the softwa re, products or services and the website are collectively referred to in this contract as the "service."

PLEASE NOTE that we do not provide warranties for the service. The contract also limits our liability. These terms are in sections 15 and 16 and we ask you to read them carefully.

2. When You May Use the Service.

You may start using the service as soon as you have finished the sign-up process.

3. General Rules, Acceptable Use Policy, Legal Rights Notice and Privacy Policy.

This contract and your use of this website are subject to and governed by, and all use must be in accordance with, the ICON General Rules the A cceptable Use Policy, the Copyright/Trademark Notice and the Privacy Polic y, which a re incorporated herein. ICON reserves the right to am end these agreements from time to time by posting the amended policies on the iCons in Medicine website. If any changes to the policies are unacceptable to you, please immediately cease your use of the service.

4. How ICON May Change This Contract.

If we change this contract other than changes to the documents identified in section 3, then we will post a notice for M embers on the iCons in Medicine website at least 30 days before the change takes place. If yo u do not agree to t hese changes, then you must cancel and st op using the service before the change takes place. If you do not stop using the service, then your use of the service will continue under the changed contract.

5. How You May Use the Service.

As a gene ral Member yo u may use t he service to participate in Comm unities of Pra ctice, forums, listservs, messaging and chat rooms in which to al low participating Members to network and exchange information. As a general Member, you may also apply for participation in the iConsult program if you qualify. The i Consult program refers to the iCons in Medicine

Program's Store-and Forward tele-consultation Software and Social Alliance website designed to facilitate the interactions between the health care professionals (Volunteers and Requestors). If approved by an ICON Chapte r or Member Organization, you may use the service for the purpose of providing tele-consultations and/or requesting tele-consultations with respect to p atient care, and communicating with iCons in M edicine Members with respect thereto.

You agree to use the iCons in Medicine website for lawful purposes and in compliance with all applicable laws, rules, regulations and policies.

6. Changes to the Service; If We Cancel the Service.

We may change the service or delete features at any time and for any rea son. We may cancel or suspend your service at any time. Our cancellation or suspension may b e without cause and/or without notice. Upon servic e cancellation, your right to use the service stops right away and all health information relative to your account is deleted. Once the service is cancelled or suspended, any data you have stored on the service may not be retrieved later.

7. You Are Responsible For Your Service Account.

Only you m ay use yo ur service account. You are responsible for all activity that takes place with your service accou nt. You may n ot authorize any third part y to access and/or use the service on your behalf.

8. Participant Materials on Our Website

From time to time, the service may p ermit participants to submit materials (e.g., biog raphical materials, educational materials, research content, etc.) which may be displayed on our pu blic website or on the web site which i s available only to Me mbers of iCons i n Medicine. Accordingly, you specifically agree that:

(a) That we have the right, but not the o bligation, in our sole discretion to prescreen, refuse, move, modify or remove any t hird party content. We do not regul arly do so currently and do not intend to do so in the future, but you nonetheless agree that we have the right to do so with respect to any content you provide. However, you should always assume that we have not pre-screened or validated any content from Members or other third parties. A ccordingly, YOU AGREE THAT YOUR USE OF OR RELIANCE UPON ANY SUCH CONTENT IS AT YOUR SOLE RISK AND YOU A RE SOLELY RESPONSIBLE FOR EV ALUATING THE ACCURACY, COMPLETENESS OR USEFUL NESS OF A NY CONTENT A CCESSED THROUGH THE SERVICE.

(b) Any content and/or opinions uploaded, expressed or submitted to a me ssage board, blog, chat room or any other publicly available section of the iCons in Medicine website (including password-protected areas), and all articles and responses to qu estions, other than the content provided by ICON, are solel y the opinions and responsibility of the person o r entity submitting them and do not necessarily reflect the opinions of ICON.

(c) You understand and acknowledge that you are responsible for whatever content you submit, and you, not ICON, have full re sponsibility for such content, inclu ding its leg ality, reliability, factual accuracy and appropriatene ss. You agree tha t you will not misstate your identity, name, or credentials on the i Cons in Medicine website or to othe r iCons in Medicine Members. By uploading or otherwise transmitting material to any area of the iCons in Medicine website, you warrant that the material is your own or is in the public domain or otherwise free of proprietary or other restri ctions and that you have the right to po st it to the iCons in Medici ne website. You grant to ICON the right to use all content you upload or otherwise transmit to the iCons in M edicine website, including, but not limite d to, your n ame and credentials, in a ny

manner ICON chooses, including, but not limited, to copying, displaying, performing or publishing it in any format whatsoever, sublicensing it, modifying it, incorporating it into other material, making a derivative work based on it, or otherwise utilizing the content in iCons in Medicine, our website and the Service, and to attribute your name to such content.

(d) ICON reserves the right, but does not assume any responsibility, to (1) remove any material posted on the iCons in Medicine website which ICON, in its sole discretion, deems inconsistent with the foregoing commitments, including any material the Company has been notified, or has reason to believe, constitutes a copyright infringement; and (2) terminate any user's access to all or part of the iCons in Medicine website. However, ICON can neither review all material before it is posted on the iCons in Medicine website nor ensure prompt removal of objectionable material after it has been posted. Accordingly, ICON assumes no liability for any action or inaction regarding transmissions, communications or content provided by third parties. ICON reserves the right to take any action it deems necessary to protect the personal safety of users of this web site and the public; however, ICON has no liability or responsibility to anyone for performance or nonperformance of the activities described in this paragraph.

(e) Your failure to comply with the provisions of this section may result in the termination of your access to the iCons in Medicine website and may expose you to civil and/or criminal liability.

9. Patient Privacy.

This website is not intended for the display or transmission of personally identifiable patient information, and it is our joint understanding that personally identifiable patient information will not be transmitted through this service. In the event that such information should be sent or received, legal requirements covering the communication of patient information vary by jurisdiction. In the United States, the Privacy Requirements of the Health Insurance Portability and Accountability Act (HIPAA), the federal privacy law governing the use and disclosure of personal health information, generally permits the free exchange of health information among health care providers for treatment purposes. With respect to HIPAA, we are acting only as a conduit for the transmission of such data and not as a business associate.

Please note, HIPAA acts only as a "floor" with respect to privacy regulation. Thus, if a local jurisdiction has adopted a law governing the privacy of health care information that is more stringent than HIPAA, then that more stringent law will govern. Please note, many jurisdictions have adopted more stringent privacy laws relating to what is commonly termed "sensitive personal information", which may include, for example, information pertaining to HIV status, mental health status or genetic testing information. You are responsible for complying with the privacy law requirements applicable to your jurisdiction, including obtaining any necessary consents or authorizations from patients, before communicating any health information that may be privileged or protected by law.

All tele-consultations and their content received on the iCons in Medicine servers will be erased 30 days after the completion of a tele-consultation.

10. Security; Authentication network.

You are solely responsible for keeping your service account log-on and password information secure. In the event that you learn of any security breach related to your log-on, password or the service generally, you will notify us promptly.

We may cancel or suspend your account for inactivity, which we define as failing to sign in to our authentication network for an extended period, as determined by us. If we cancel your credentials, your right to use our authentication network immediately ceases.

11. Advertisements.

If your organization is interested in advertising on the iCons in Medicine website, please contact support@iconsinmed.org.

12. Links to Other Sites; References to Third Parties.

The iCons in Medicine website may contain links to other websites. ICON is not responsible for and does not endorse the content, products, services or practices of any third party websites, including, without limitation, sites framed within the iCons in Medicine website or third party advertisements, and does not make any representations regarding their quality, content or accuracy. Your use of third party websites is at your own risk and subject to the terms and conditions of use for such websites.

13. Software.

If you receive software from us as part of the service, then we grant you the right to use the software for the authorized use of the service as stated in this Service Agreement. We reserve all other rights to the software.

We may post upgrades to the software that you may be required to download to your computer to update, enhance and further develop the service.

You will not disassemble, decompile, or reverse engineer any software included in the service, except and only to the extent that the law expressly permits this activity.

Unless we notify you otherwise, your right to use the software will end on the date your service ends.

14. Copyright Restriction / Use of Content.

The entire contents of this web site (including all information, software, text, displays, images and audio) and the design, selection and arrangement thereof, are proprietary to ICON or its affiliates or licensors and are protected by United States and international laws regarding copyrights, trademarks, trade secrets and other proprietary rights. You are authorized only to use the content on the iCons in Medicine website for personal use or legitimate business purposes related to your role as a current or prospective customer, supplier, or distributor of ICON. You may not copy, modify, create derivative works of, publicly display or perform, republish, store, transmit or distribute any of the material on this site without the prior written consent of ICON, except to: (a) store copies of such materials temporarily in RAM, (b) store files that are automatically cached by your web browser for display enhancement purposes, and (c) print a reasonable number of pages of the iCons in Medicine website; provided in each case that you do not alter or remove any copyright or other proprietary notices included in such materials. Neither the title nor any intellectual property rights to any information or material in this website are transferred to you, but remain with ICON or the applicable owner of such content. Except as expressly authorized by ICON in writing, you may not reproduce, sell or exploit for any commercial purposes (a) any part of this website, (b) access to this website or (c) use of this website or of any services or materials available through this website.

15. WE MAKE NO WARRANTY; INDEPENDENT MEDICAL JUDGMENT.

WE PROVIDE THE SERVICE **"AS-IS," "WITH ALL FAULTS" AND "AS AVAILABLE."** WE DO NOT GUARANTEE THE ACCURACY OR TIMELINESS OF INFORMATION AVAILABLE FROM THE SERVICE, OR THAT THE SERVICE WILL BE REGULARLY AVAILABLE ON A

24X7 BASIS OR OTHERWISE OPERATE WITH OUT INTERRUPTION OR ERROR. THE ICON PARTIES GIVE NO EXPRESS WARRANTIES, GUARANTEES OR CONDITIONS. YOU MAY HAVE ADDITIONAL RIGHTS UNDER YOUR LOCAL LAWS THAT THI S CONTRACT CANNOT CHANGE. WE EXPRESSLY DI SCLAIM ANY EXPRESS OR IMPLIED WARRANTIES OF ANY KI ND, INCLUDING THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, WORKMANLIKE EFFORT AND NON-INFRINGEMENT.

You acknowledge and agree that the ICON parties are n ot providing any m edical advice through the service and all content or tele-consultations received through the service are not a substitute for the profe ssional judgment of healthcare p roviders in diagn osing and tre ating patients. The ICON parties are not giving medical advice or pro viding medical or dia gnostic services.

16. LIABILITY LIMITATION.

YOU ACKNOWLEDGE AND AGREE THAT IN NO EVENT SHALL THE ICON PARTIES BE LIABLE TO YOU OR YOUR PATIENTS FO R ANY DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES (INCLUDING LOSS OF USE OR LOST PROFITS) ARISING OUT OF OR OT HERWISE IN CONNECTION WITH THE SERVICE, WHETHER SUCH LIABILITY ARISES FROM ANY CLAIM BASED UPON CONTRACT, WARRANTY, TORT OR OTHERWISE, AND WHETHER OR NOT THE ICON PARTIES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE. IN ANY EVENT, THE ICON PARTIES' CUMULATIVE LIABI LITY TO YOU A ND YOUR PATIENTS FROM ALL CAUSES OF ACTION AND ALL THEORIES OF LIABILITY SHALL NOT EXCEED AN AMOUNT EQUAL TO $1,000 U.S. DOLLARS. YOU ACKNOWLEDGE AND AGREE THAT THE DISCLAIMERS AND LIMITA TIONS OF LIABILITY IN THIS SECTION ARE REASONABLE AND THA T THE ICON PARTIES WOULD NOT HAVE OTHERWISE MA DE THE SERVICE AVAILABLE TO YOU IF THE ICON PARTIES COULD B E SUBJECT TO LIABILITY OR DAMAGES IN EXCESS OF THIS PARAGRAPH.

Some jurisdictions do n ot allow the exclusion or limitation of incide ntal or consequential damages, so the a bove limitations or exclusions may not a pply to you. They also m ay not apply to you becau se your province or country may not allow the exclu sion or limitation of incidental, consequential or other damages.

17. Indemnification.

You agree to indemnify and hold harmless ICON and its officers, directors, employees, agents, affiliates, third party informat ion providers, lice nsors, contractors and others involved in the iCons in Medicine website or the delivery of products, services or information over the iCons in Medicine website, from and against any and a ll liabilities, expenses, damages and costs, including reasonable attorney's fee s, arising from any violation by you of this Agre ement or your use of t he iCons in Medicine website or any products, services or information obtained from this website.

18. Your Notices to Us.

You may notify us as state d in the cu stomer support or "help" area for the servi ce. We do not accept e-mail notices.

19. Notices We Send You; Consent Regarding Electronic Information.

This contract is in electronic form. We have p romised to send you certain information in connection with the service and have the right to send you certain additional information. There may be other information regarding the service that the law requi res us to send you. We may

send you this information in electronic form. You have the right to withdraw this consent, but if you do, we may cancel your service. We may provide required information to you:

* by e-mail at the e-mail address you specified when you signed up for your service;
* by access to an ICON website that will be designated in an e-mail notice sent to you at the time the information is available; or
* by access to an ICON website that will be generally designated in advance for this purpose.

Notices provided to you via e-mail will be deemed given and received on the transmission date of the e-mail. As long as you can access and use the service, you have the necessary software and hardware to receive these notices. If you do not consent to receive any notices electronically, you must stop using the service.

20. Assignment.

We may assign this contract, in whole or in part, at any time with or without notice to you. You may not assign this contract, or any part of it, to any other person. Any attempt by you to do so is void. You may not transfer to anyone else, either temporarily or permanently, any rights to use the service or any part of the service.

21. No Third Party Beneficiaries.

This contract is solely for your and our benefit. It is not for the benefit of any other person, except for permitted successors and assigns under this contract.

22. Choice of Law and Jurisdiction.

Illinois state law governs the interpretation of this contract and applies to claims for breach of it, regardless of conflict of laws principles. All other claims, including claims regarding consumer protection laws, health information portability laws, and in tort, will be subject to the laws of your state of residence in the United States, or if you live outside the United States, the laws of the country to which we direct your service.

Exclusive jurisdiction over any cause of action arising out of this contract or your use of the iCons in Medicine website shall be in state or federal courts in the Cook County in the State of Illinois. You agree to submit to the jurisdiction and venue of such courts.

All parts of this contract apply to the maximum extent permitted by law. A court may hold that we cannot enforce a part of this contract as written. If this happens, then you and we will replace that part with terms that most closely match the intent of the part that we cannot enforce. The rest of this contract will not change. This is the entire contract between you and us regarding your use of the service. It supersedes any prior contract or statements regarding your use of the service. If you have confidentiality obligations related to the service, those obligations remain in force (for example, you may have been a beta tester). The section titles in the contract do not limit the other terms of this contract.

[PLEASE NOTE: We recommend that you require participants to click "I accept" on this contract before they can enroll.]

Any rights not expressly granted herein are reserved.

Acceptable Use Policy

Introduction

This Acceptable Use Policy (AUP) sets forth the principles that govern the use by Members of the Web-based products and services provided by International Consults in Medicine (ICON) as part of its iCons in Medicine Program. This AUP is designed to help protect our Members and the Internet community-at-large from irresponsible, abusive or illegal activities.

General Violations

The term "iCon service" as used here refers collectively to all software, products, web sites or services, including updates, provided by ICON. This AUP identifies the actions that ICON considers to be Prohibited Actions. Members agree to use the ICON service for lawful purposes and in compliance with all applicable laws, rules and regulations. Members agree that the following actions are Prohibited Actions which may result in suspension of Membership privileges:

A. Prohibited Actions:

- Copying or otherwise duplicating any iCon service or creating subsets or derivative databases from the iCon database, except for personal use only.
- Assigning, selling or passing along any iCon service.
- Publishing or otherwise disseminating any iCon service or creating subsets or derivative databases from the iCon database for commercial use or sale.
- Providing services for a fee using any iCon service or any subsets or derivatives thereof.
- Allowing data from the iCon service to be made available to others.
- Downloading any portion of any iCon service onto any electronic storage media or distributing or transferring the iCon database or Search Results in any form (printed, electronically relayed, posted to public list services or bulletin boards, or magnetically stored) to, or for the benefit, of others.
- Distributing passwords and/or access codes without prior written authorization
- Uploading to or transmitting on the iCon service any defamatory, indecent, obscene, harassing, violent or otherwise objectionable material, or any material that is, or may be, protected by copyright, without permission from the copyright owner.
- Using the iCon service to violate the legal rights (including the rights of publicity and privacy) of others or to violate the laws of any jurisdiction.
- Misrepresenting the credentials of any person and/or an affiliation with any person or organization.
- Collecting information about others (including e-mail addresses) without their consent.

- Downloading or uploading a file or software or including in a message any software, files or links that you know, or have reason to believe, cannot be distributed legally over any iCon service or that you have a contractual obligation to keep confidential (notwithstanding its availability on any iCon service).
- Using the service in a way that harms us or our affiliates or partners, or any patients or employees of an ICON party.
- Using any manual process to monitor or copy any of the material on this site or for any other unauthorized purpose without the prior written consent of ICON.

Institutional users should contact their Site Administrator regarding the General Terms and Conditions of their License Agreement.

B. Prohibited Actions: Impersonation/Forgery

- Adding, removing or modifying identifying network header information (aka "spoofing") in an effort to deceive or mislead.
- Attempting to impersonate any person by using forged headers or other identifying information.

C. Prohibited Actions: Network unfriendly activity

- Any activities that may adversely affect the ability of other Members to use iCons in Medicine services or the Internet are prohibited. This includes "denial of service" attacks against the iCons in Medicine servers, network hosts or individual user.

D. Prohibited Actions: Commercial / Improper e-mail

- Sending unsolicited commercial e-mail.
    - Using an iCons in Medicine e-mail or Website address to distribute commercial e-mail is prohibited.
- Sending large volumes of unsolicited e-mail (aka "mail bombing").
- Intercepting or attempting to intercept electronic mail not intended for you.

E. Prohibited Actions: Access control and Authentication

- Attempting to circumvent user authentication or security of any host, network, or account (aka "cracking"). This includes, but is not limited to, accessing data not intended for the customer, logging into a server or account the customer is not expressly authorized to access, or probing the security of iCons in Medicine servers and networks.

F. Prohibited Actions: Proxy Hunters, Spiders, Robots, Viruses

- Using any program, script, command, robot, BOT, spider, periodic caching of information stored by ICON, “meta-searching” or sending messages of any kind

designed to interfere with a User's session by any means, locally or by the Internet.
- Uploading or otherwise transmitting files that contain a virus or corrupted data;

Enforcement

International Consults in Medi cine reserves the right to m onitor Internet access to the iCons in Medicine Program services by Mem ber(s) as part of the norm al course of its business practice. Should ICON discover any Member(s) engaged in Prohibited Actions as outlin ed above, ICON reserv es the right to temporarily s uspend Member access to th e iCons in Medicine Program Host Server and /or iCon database. ICON shall make written/electronic notification to Member point of cont act of any temporary suspension, and the cause th ereof, as soon as reasonably possible. This temporary suspension will remain in effect until the Prohibited Actions have ceased.

General Rules

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Article 1
Mission, Goal and Founding Principles of ICON Alliance

Section 1.01 Mission Statement.
The mission of ICON Alliance is to create a volunteer Alliance of knowledgeable and committed health professionals, enabled by appropriate information and communication technology, in order to make-high quality medical knowledge available wherever medicine is practiced and bridge the geographic, cultural and political barriers around the world.

Section 1.02 Goal of ICON Alliance.
The goal of ICON Allian ce is to a ddress health disparities by increasing the quality a nd availability of health and rehabilitation services in remote and medically underserved areas.

Section 1.03 Founding Principles of ICON Alliance.

The principles on which ICON Alliance was found ed, and which guide the operation and expansion of the global I CON Alliance, include the fo llowing (collectively, the **"Founding Principles"**):
(a) Medical knowledge and skills should be shared across political, social, economic and cultural boundaries in order to promote the health and wellness globally.
(b) Volunteer activities p rovide an im portant means of ad dressing health disparities while

allowing health care providers to connect with their mission of healing.
(c) Information and communication technologies can be used to foster connections and relationships that yield importa nt benefits to ICON Allian ce both within and beyon d the boundaries of medicine.
(d) Every health care provider who meets the eligibility requirements set out in these Gen eral Rules (Article 7) should have the opportunity to participate in and benefit from the online tele - consultations, medical missions, trainings and conferences offered by ICON Alliance.
(e) ICON Alliance must transce nd all boundaries of race, ge nder, religion, national o rigin, geography, and political p hilosophy, and offer medical oppo rtunities to all eligible perso ns in accordance with uniform worldwide standards.
(f) ICON Alliance celebrates and strives to pro mote the spirit o f volunteerism and a love of healing for its own sake. To that end, ICON Alliance aims to provide every qualified provider with an opportunity to participate in volunteer tele-consultations, medical missions, training and conferences which challenge that he alth care pr ovider to hi s or her full est potential. ICON Alliance recognizes that health disparities exist in all countries and therefore requires that ICON Alliance Conferences and Trainings offer materials that a re appropriate to providers of all nations, cultures and practice environments.

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Section 2.01 Definitions.
The words and phrases listed below have the following meanings whenever they are u sed in these General Rules with initial capitalization:
"Advisory Committee(s)" means, individually or collectively, th e committees formed within ICON Alliance as needed to perform the functi ons given to it in the General Rules or announced during its formation, e.g., Leadership Councils.
"Affiliation License" means the written license which each Affiliated Entity is requi red to complete and submit to International Consultants in Medicine, as part of its application for new

or renewed affiliation as an authorized ICON Alliance program.
"Affiliation Standards" means the written criteria established by ICON for granting or renewing the affiliation of Affiliated Entities, which criteria ICON may revise from time to time.
"Affiliated Entity(s)" unless otherwise indicated by a specific Section of these General Rules, means any Regional Organization, National Organization, U.S. Organization, or other organization affiliated by or through ICON's authority to organize and conduct the ICONs in Medicine Program Tele-consultations and Medical Missions within a particular jurisdiction. Where required by the context, the phrase "Affiliated Entity" also includes Sub-Entities (e.g., Chapters and Member Organizations)**.**
"Board of Directors" means the Board of Directors of an Entity which is operated as an independent legal entity or the committee or association which has the ultimate legal responsibility for governing the affairs of an Entity which is not operated as an independent legal entity.
"Chapters" refers to groups of three or more Volunteers who join together and are registered by ICON or an Affiliated Entity to conduct ICON Alliance activities that are entirely within the jurisdiction of the registering body.
"Chapter Conferences" means any Conference offered or conducted by a Chapter, encompassing the same geographic area that defines the jurisdiction of that Chapter.
"Conference" means, generally, any ICON Alliance Conference offered or conducted by ICON, a COC, an Affiliated Entity, or any other organization or entity licensed by ICON to conduct Conference under the name or auspices of ICON Alliance. Conferences are to bring together ICON Alliance with health care providers in more than two (2) Official medical specialties and technology experts in order to exchange ideas and develop relations, strengthen international ties, foster goodwill and promote mutual understanding.
"COC(s)" means, individually and collectively, the Conference Organizing Committee(s) licensed and authorized by ICON to organize, finance and conduct specific World Conference and/or any other ICON-sanctioned events.
"Executive/National Director" means the individual who has the authority and responsibility for managing the day-to-day affairs of an Affiliated Entity, as required by Section 5.01(b)4.
"Founding Committee" means a committee formed to create an Affiliated Entity in a jurisdiction where there is no Affiliated Entity or to reorganize a formerly Affiliated Entity.
"Graphics Standards Guide" means the publication entitled "Graphic Standards Guide" issued periodically by ICON for the use of all Affiliated Entities, and any amendments or supplements to the Graphics Standards Guide subsequently approved by ICON.
"ICON" means International Consultants in Medicine the entity defined and described in Section 2.02.
"ICONs in Medicine Program" means all of the programmatic elements of ICON, i.e. Tele-consultations, Medical Missions, Conferences and ICON Online Resource Center
"ICON's Chair" means the Chairperson of the Board of Directors of ICON.
"ICON Medical Handbook" means the separate document entitled "ICON Medical Handbook," which is issued periodically by ICON for the use of all Affiliated Entities and COCs in conducting Tele-consultations and Medical Missions, as amended and updated from time to time by ICON.
"ICON Logo" means the official logo of ICON and ICON Alliance and all of its component marks and figures, which logo is depicted in the Graphics Standards Guide and is registered with the United States Patent and Trademark Office as ICON's official logo and registered mark.
"ICON Mark(s)" means, individually and collectively: (1) the mark and name "ICON Alliance," regardless of how that name is used or displayed, and specifically, whether or not it is used by itself or with ICON's name, the name of an Affiliated Entity, the name or logo of a COC, or the name of a ICON Alliance event; (2) the ICON Logo; (3) any Conference or COC logo, slogan or theme used by ICON, a COC or an Affiliated Entity; (4) The Law (5) any figures or logos used by ICON or any COC as symbols for medical specialty consultations; and (6) any other mark, name, logo, emblem, slogan, motto, depiction or other expression which ICON has approved for use in connection with ICON Alliance, for which ICON has filed ownership registration(s) with the U.S. Patent and Trademark Office and/or any other trademark registration entity or

governmental authority, or which ICON determines has become identified and associated with ICON Alliance through repeated usage in connection with ICON Alliance programs or events.
"ICON Alliance," when used in these General Rules without any other modifying or limiting term, is intended as a generic reference to the collection of affiliated organizations that participate in the ICONs in Medicine Program of medical Tele-consultations, Medical Missions and Conferences and the global linkages and other activities such as related training and fund raising as established and administered by ICON.
"iConsult" refers to the iCons in Medicine Program's Store-and-Forward tele-consultation Software and Social Alliance website designed to facilitate the interactions between the Volunteers and Requestors.
"International Consultants in Medicine" refers to "ICON" as previously described.
"Medical Missions" are events which bring together health care professionals through a blended distance learning approach to telehealth in order to promote and carry out a variety of exchanges in two major categories: trainings and interventions.
"Medical Specialties" is defined in Section 7.06 and means, individually and collectively, the Medical Specialties that are either **"Recognized**" or **"Offered"** by the ICONs in Medicine Program through its Tele-Consultation iConsult software.
"Member(s)" refers to any person who has enrolled in the iCons in Medicine Program to become part of ICON Alliance.
"Member Organizations" means any organization meeting the criteria defined in Section 6.05 and registered through an Affiliated Entity or by ICON to receive Tele-consultations through the iConsult.
"Multi-National Conference" means any Conference offered or conducted on a multi-national basis, but not on a Regional or worldwide basis, by ICON or ICON's authorized designees, or by two or more National Organizations with prior authorization from ICON.
"National Conference" means any Conference or conducted on a national basis by a National Organization.
"National Organization" means an Affiliated Entity which is licensed and authorized by ICON as provided in these General Rules to operate ICON Alliance programs within the boundaries of a particular nation. The National Organization may be operated as either an independent legal entity or within an independent legal entity, approved as its sole Accredited Entity for that nation and which can register Member Organizations and Chapters (Sub-Entities).
"Online Resource Center" refers to the ICONs in Medicine Program component for the member-oriented website which includes a wide array of tools, resources and people, designed to share ideas and knowledge, enhance skills and generate strategies and innovations.
"Oversight Committee" is defined as a committee established by the Board of Directors of a National Organization to oversee Icon program activities.
Program Development System" is defined as a self-assessment management tool designed to support Affiliated Entities in growth and development. PDS is further defined in Section 5.03(b).
"Regional Conference" means any Conference offered or conducted on a multi-national basis, but not on a worldwide basis, by ICON or ICON's authorized designees, or by two or more National Organizations with prior authorization from ICON, which all Affiliated Entities within that Region are invited to attend.
"Region(s)" means the regional and sub-regional divisions of Affiliated Entities within discrete areas of the world, which ICON recognizes from time to time as provided in Section 2.08.
"Requestor(s)" is a medical professional who requests a consultation from Members of ICON Alliance through the iConsult program.
"Sub-Entity(s)" consist of Members who may be part a local or specialty Chapters consisting of Volunteers and Member Organizations consisting of Requestors (that are eligible to receive ICON Alliance services) located within the jurisdiction of a National Organization, Regional Organization or U.S. Organization and are specifically registered with one of those organizations or by ICON.
"Uniform Standards" means, individually and collectively, these General Rules, the ICON Medical Handbook, the World/Regional Conference Charter, the Graphics Standards Guide, the Accreditation Standards, the Affiliation License, any subsequent changes or additions to

any of these documents, and any other policies adopted by ICON by written notice to the affected Affiliated Entities.
"U.S. Conference" means any Conference offered or conducted on a state-wide basis by a U.S. Organization.
"U.S. Multi-State Conference" means any Conference offered or conducted on a multi-state basis within the United States, but not on a national basis, by ICON or ICON's authorized designees, or by two or more U.S. Organizations with prior authorization from ICON.
"U.S. Organization" means the Affiliated Entity licensed and authorized by ICON as provided in these General Rules to operate ICONs in Medicine Program within the boundaries of a particular state or territory of the United States.
"Volunteers" are individuals licensed as physicians or health care workers who enroll in a Chapter with the explicit understanding that they will volunteer for a minimum of three (3) Tele-consultations per year from Requestors within ICON Alliance.
"Workshop" means any ICON Alliance training offered or conducted by ICON, a COC, or an Affiliated Entity.
"World Conference" means any Conference offered or conducted on a worldwide and international basis by ICON or a COC.

Section 2.02 Role of ICON.
. International Consultants in Medicine (ICON), founded by William Kennedy Smith, M.D., encompasses the ICONS in Medicine Program and is the international governing body of ICON Alliance. In discharging its responsibilities as the world governing body of ICON Alliance, ICON establishes and enforces all official policies and requirements of ICON Alliance, oversees the conduct and expansion of ICON Alliance programs throughout the world, and provides training, technical assistance and other support to Affiliated Entities. ICON owns and operates all information, technology, software and infrastructure associated with the ICONs in Medicine Program. ICON is a not-for-profit corporation organized under the laws of the State of Illinois, USA, with its principal office in Chicago, IL, USA. ICON is a charitable organization that is exempt from United States federal taxation under Section 501(c)(3) of the Internal Revenue Code of the United States.

Section 2.03 Powers and Responsibilities of ICON.
ICON establishes and enforces all policies and requirements concerning the organization and conduct of ICON Alliance and the ICONs in Medicine Program throughout the world and is the final authority on all matters relating to both ICON Alliance and the ICONs in Medicine Program. Without limiting the generality of the preceding sentence, ICON's powers and responsibilities include the following:
(a) Protecting and Licensing Use of All Intellectual Property of ICON. As sole owner of the name "International Consultants in Medicine" "ICON" which is the official logo of ICON Alliance, and all other ICON Marks, ICON establishes and enforces the conditions under which any other party may be permitted to use the name "ICON Alliance," "International Consultants in Medicine" or any other ICON Mark(s).
(b) Establishing Uniform Standards. To preserve the image and integrity of ICON Alliance and the ICONs in Medicine Program, ICON establishes and enforces uniform standards for all Affiliated Entities and all activities conducted in the name of or under the auspices of "ICON Alliance," including the standards set forth in these General Rules, the Affiliation Standards, the requirements of each Affiliated Entity's Affiliation License, the ICON Consultation Rules, the ICON Medical Mission Guidelines, the World/Regional Conference Charter, the Graphics Standards Guide, and the other policies defined in Section 2.01 as together constituting the Uniform Standards. This includes any subsequent changes and/or additions to any of these documents, and any other policies adopted by ICON by written notice to the affected Affiliated Entities.
(c) Affiliating ICON Alliance Organizations. Through the affiliation process detailed in Article 6, ICON licenses and affiliates qualified Affiliated Entities to recruit and register Chapters and Member Organizations within their respective geographic jurisdiction and to ensure that these registered Chapters and Member Organizations comply with the General Rules and other

Uniform Standards.
(d) Establishing the Rules and Guidelines for ICON Alliance Activities. ICON establishes the rules, guidelines and procedures governing the conduct of ICON Alliance activitie s including Tele-consultations and Medical Missions, including all policies concerning eligibility for participation in ICON Alliance; requirements for general Members, Volunteers and Requestors; the range of Offered Me dical Specialties; Recognized Medical Specialtie s and requirements and standards in spe cific medical disciplines; and for trainin g in tele-co nsultations and procedures for organizing, financing and conducting ICON Alliance Conferences.
(e) Organizing World and Regional Conferences. ICON organizes and conducts, or licenses qualified COCs to organize and conduct, all World and Regional Conferences.
(f) Administering the Worldwide ICON Alliance. ICON oversees the governance and administration of the worldwide ICON Alliance, appoints and consults with appropriate councils, committees and other advisory bodies (including those described in Article 3) concerning the policies and administration of ICON Alliance, and handles all worldwide publicity activities relating to ICON Alliance.
(g) Conducting Programs and Activities for the Benefit of ICON. ICON conducts specific ICON programs and holds or sponsors specific medical, publicity and p romotional events in various locations throughout the world, including in locations within the geographic jurisdictions of Affiliated Entities, for the benefit of ICON and ICON Alliance.
(h) Approving Multi-Jurisdictional Activities by Affiliated Entities. ICON approves and establishes the requi rements for any ICON Alliance Medical Missions, programs or o ther activities which cross Affiliated Entity jurisdictional boundaries, such as Regional Conferences, Multi-National Conferences, U.S. Multi-State Conferences, or other multi-jurisdictional activities proposed to be conducted by Affiliated Entities or COCs or ICON.
(i) Overseeing Fundraising and Development Activities. ICON establishes and enforces requirements concerning all a ctivities conducted by Affiliated Entities o r their respective licensees which seek to raise funds in the name of, or for the benefit of, "ICON Alliance."
(j) Enforcing ICON Alliance Policies. ICON has the right to suspend or permanently ban any ICON Alliance Member, Chapter or Member Organization of any Affiliated Entity, Founding Committee or COC from participation in any IC ON Alliance activity, impose sanctions on an Affiliated Entity as provided in Article 6, sus pend or revoke an Affiliated Entity's affiliation, and take any oth er disciplinary, preventive or enforcement action against any ICON Allian ce Member, Chapter or Member Organization of any Affiliated En tity, Founding Committee or COC, or a gainst any ot her party to the ext ent permitted by law, in any case involving violation(s) of these General Rules or the other Uniform Standards.

Section 2.04 Role of Affiliated Entities.
ICON licenses and affiliates qu alified Affiliated Entities thro ughout the worl d to re cruit Volunteers, provide tele-consultations, register Member Organizations and operate ICON Alliance Medical Missions. To t he extent permitted by these Gener al Rules, Affiliated Entities may, in turn, dire ctly operate, or li cense and register Chapters and Mem ber Organizations within their respective geographic jurisdictions.

Section 2.05 Powers and Responsibilities of Affiliated Entities.
(a) Generally. Except as otherwise provided in these General Rules, each Affiliated Entity ha s the full auth ority and responsibility for or ganizing and con ducting Volunteer and Requestor enrollment, Chapter and Member Organization registration, Medical Missions and Conference programs within its geographic boundaries, subject to the requirements of these General Rules, the Affiliated Entity's Affi liation License, the Affiliation Standa rds and the other Uniform Standards.
(b) Matters within an Affiliated Entity's Decision-Making Authority. Subject to these General Rules and othe r Uniform Standards, and subject to the Affiliated En tity remaining affiliated by ICON, each Affiliated Entity has the authority to determine: the scope of it s operations; the frequ ency and scop e of the Te le-consultations, Medical Missions and Conferences to be co nducted by the Affiliated Entity or by its Sub-Entities (if any) withi n its jurisdiction; the selection of who will represent that Affiliated Entity in all World Conferences

and, where applicable, in Regional Conferences or Regional U.S. Conferences; the personnel policies which will govern that Affiliated Entity's staff and volunteers; the requirements for creating and overseeing Sub-Entities within its jurisdiction; the methods and projects which will be used by that Affiliated Entity and/or by its Sub-Entities (if any) to raise funds within its jurisdiction; and generally, any other matters concerning the organization, conduct or financing of ICON Alliance programs within its geographic jurisdiction (excluding World Conferences, Regional Conference or Regional U.S. Conferences), so long as there is no conflict in any instance, either procedurally or substantively, between the decisions of the Affiliated Entity and the requirements of the Affiliation Standards, the Program's Affiliation License, these General Rules, or the other Uniform Standards.

Section 2.06 No Liability

ICON and Affiliated Entities are each separate legal entities. ICON is not responsible for the debts or obligations of any Affiliated Entity and no Affiliated Entity if responsible for the debts or obligations of ICON. Affiliated Entities may not contract with name of ICON, nor may ICON contract in the name of an Affiliated Entity.

Section 2.07 Role of Conference Organizing Committees (COCs).
COCs are separate organizations or associations that are licensed from time to time by ICON to organize, finance and conduct World Conferences or Regional Conferences. The powers and duties of any such COC are determined solely by ICON, and are set forth in a written contract between ICON and each sanctioned COC. ICON's contracts with each COC must set out specific requirements for specific World Conference or Regional Conference, in addition to those imposed by these General Rules and the other Uniform Standards.

Section 2.08 Regional Divisions for Affiliated Entities.
(a) Purpose of Regions; Creation and Composition. ICON periodically establishes Regions, for the purpose of facilitating the efficient governance and expansion of ICON Alliance, facilitating the exchange of information and ideas between ICON and its Affiliated Entities, and facilitating the exchange of information and ideas between individual Affiliated Entities located within one or more Regions.
(b) Regional Divisions for Affiliated Entities. ICON determines whether to recognize a specific Region, and how each recognized Region should be defined, and reserves the right to re-define Regions (or their respective Sub-Regions) if necessary in ICON's judgment to meet the needs of ICON Alliance.
(c) Sub-Regional Divisions. ICON may, at its option, recognize sub-Regions for discrete parts of the world located within a recognized international Region (**"Sub-Regions"**). ICON shall keep all Affiliated Entities regularly informed of the definition and composition of all Sub-Regions recognized by ICON.

Section 2.09 Other Organizations Established or Recognized by ICON.
From time to time, ICON recognizes or establishes, or authorizes its Affiliated Entities to establish, various councils or committees comprised of Affiliated Entity representatives or participants, or other persons affiliated with ICON Alliance for the purpose of assisting ICON in policy development or enforcement, program management and expansion, and the exchange of information between and among ICON and Affiliated Entities throughout the world, including (but not necessarily limited to) the Leadership Councils and other advisory committees defined in these General Rules (collectively, "Advisory Committees"). Advisory Committees perform important advisory roles within ICON Alliance. Each Advisory Committee performs the functions given to it in these General Rules, or in the case of any Advisory Committee subsequently created by ICON, the functions specified in the policy document issued by ICON to announce that Advisory Committee's formation and responsibilities.

Section 2.10 Relationship with The Center for International Rehabilitation.
The Center for International Rehabilitation (the "CIR") is a nonprofit organization that shares

ICON's goal of helping to increase the quality and availability of medical and rehabilitation services in remote and underserved areas. The CIR provided critical funding necessary for the establishment of ICON Alliance. The CIR continues to provide technical assistance, guidance, and professional consultation to ICON, as well as other forms of support and assistance in expanding ICON Alliance and maintaining and operating the ICONs in Medicine Program.

Section 2.11 Relationship with United Nations.
Through its relationship with CIR, ICON is a registered non-governmental organization of the United Nations (an **"NGO"**). As an NGO, ICON has the responsibility for working with nations throughout the world to help improve the quality and availability of medical and rehabilitation services.

Section 2.12 Relationship with Other Organizations.
ICON periodically forms relationships with other organizations for purposes related to the management and expansion of ICON Alliance. (For example, ICON has formed relationships with the University Clinical Center in Tuzla, Bosnia to facilitate Medical Missions.) Depending on the context and the nature of a specific organizational relationship recognized by ICON, Affiliated Entities may be asked or required to cooperate with that collaborating organization in planning or implementing specific programs or events for the benefit of ICON Alliance. Any such requests or requirements will be outlined by ICON in written policy directives to affected Affiliated Entities, outlining the purpose and nature of ICON's collaboration with any such third-party organizations.

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Section 3.01 ICON's Governance Authority and Responsibility.
ICON has the right to require that the ICONs in Medicine Program and its subcomponents (e.g., Tele-consultations using iConsult software, Medical Missions, Conferences and Online Resource Center) offered under the name or auspices of "ICON Allian ce" are o rganized, financed and conducted in accordance with its standards, and in a manner that preserves the quality and reputation of ICON Alliance and best serves the interests of its members worldwide. To that end, ICON has the authority to interpret, issue and periodically amend or update these General Rules and the ot her Uniform Standards as well as othe r written poli cies on matters covering the entire scope of ICO N Alliance, including, to th e extent ne cessary in ICON's judgment, matters pertaining to the proper management and operation of I CON programs offered by Affiliated Entities. Final autho rity on all matters affecting the organization, affiliation, financing and conduct of ICON programs offered by Affiliated Entities and other ICON Alliance programs rests with Intern ational Consultants in Medicine. as the creator, developer and world governing body for ICON Alliance.

Section 3.02 Lines of Communication within ICON Alliance.
Unless otherwise provided in these General Rules or i n any other Unif orm Standards, communications and reporting within ICON Alliance will be conducted vertically as bet ween ICON and all Affiliated Entities, betwe en ICON and the COCs, and between ICON and any Advisory Committee which reports to ICON. T hese vertical comm unications will be supplemented by lateral communications among Affiliated Entities, su ch as in connection with their service on Advisory Committees.

Section 3.03 Authority of ICON's Board.
ICON is governed by it s Board of Directors (**"ICON's Board"**). ICON's Board is ultimately responsible for estab lishing all policie s which govern ICON and ICON Alliance. ICON's Bo ard discharges this responsibility by approving the General Rules and all major policies embodied in the other Uniform Standards.

Section 3.04 International Advisory Committee.
(a) Responsibilities. One of the committees of ICON' s Board shall be a n "International Advisory Committee." This International Advisory Committee (the "IAC") shall be responsible for advising ICON's Board on matters related to I CON Alliance which affect all Affiliated Entities. The IAC will also be responsible for reviewing recommendations proposed by the Regional Leadership Councils (defined in Section 3.05) or by individual Affiliated Entities concerning matters affecting ICON Alliance. The IAC w ill report to ICON' s Board concerning all recommendations being made by the IAC, either on the IAC's own initiative or as the result of the IAC's review of p roposals received from Regional Leadership Councils or individual Affiliated Entities.
(b) Size and Composition. Each of the seven Regional Leadership Councils shall elect its own representative to serve o n the IAC (consistent with the memb ership qualifications listed in subsection (c) belo w), so that the IAC comp rises seven members, each of whom re presents one Region through a Regional Leadership Council.
(c) Criteria for Membership. Persons elected to membe rship on the IAC shall me et the following criteria:
(1) Be an Executive/National Director, or member of a Board of Directors of an Affiliated Entity;
(2) Have extensive knowledge of ICON Alliance;
(3) Understand the role and responsibilities of the IAC and Regional Leadership Councils;
(4) Be an effective advocate for the mission and Founding Principles of ICON Alliance; and
(5) Regularly attend or participate in meetings or conference calls convened by the IAC.

Section 3.05 Regional Leadership Councils.

(a) Creation. Regional Leadership Councils (sometimes referred to as Regional Advisory Councils) each referred to herein as **"RLCs"** may be established for one or more Regions or Sub-Regions with the approval of ICON's Board. At the time of such approval, ICON will specify in writing, in the form of a resolution adopted by ICON's Board, the geographic area represented by each RLC. RLCs shall not be separate legal or juridical entities. RLCs are not a part of ICON's corporate structure and may not contract in the name of ICON. RLCs are responsible for their own compliance with any applicable laws.
(b) Operating Procedures and Standards. Each RLC will conduct its affairs in accordance with written operating procedures and standards, which must be consistent with these General Rules, and which must be approved in advance by ICON at the time that ICON's Board approves the formation of that RLC (the **"RLC Operating Procedures"**). These RLC Operating Procedures shall set forth the procedures and standards for, among other matters, size of membership, selecting members, and for scheduling and holding meetings of that RLC.
(c) Purpose. Each approved RLC will represent all Affiliated Entities within its respective Region or Sub-Region in advising ICON on all policy-related issues affecting those Affiliated Entities, including matters related to Tele-consultations, Medical Missions, technical assistance, fundraising, public relations, and program management, and the other matters listed in subsection (e) below. If an RLC is approved for a Sub-Region, that Sub-Regional RLC will coordinate its communications to ICON with the RLC for the Region in which that Sub-Region is located.
(d) Composition. The members of an RLC will be elected by the Affiliated Entities located within the RLC's Region or Sub-Region, in accordance with the Operating Procedures for that RLC, and consistent with the criteria for membership outlined in subsection (f) below. Any RLC may designate, through its Operating Procedures, the Managing Director of that Region as an ex-officio member or co-chair of its RLC.
(e) Areas of Responsibility. Unless otherwise provided in the Operating Procedures of an RLC, each RLC shall be responsible for:
(1) Establishing long-range plans for Region-based events, such as Regional Conferences, Regional Medical Missions, meetings of Executive/National Directors of Affiliated Entities in the Region, and training seminars;
(2) Reviewing and making recommendations to ICON concerning proposed dates and venues for Regional Conferences, and submitting proposals from Affiliated Entities within the Region to host Regional Conferences;
(3) Reviewing and making recommendations to ICON concerning proposed dates and venues for Region-based trainings, and submitting proposals from Affiliated Entities within the Region for hosting such trainings;
(4) Planning and conducting Regional Conferences in collaboration with ICON; and
(5) Advising ICON's continental offices on program priorities and methods for expanding ICON Alliance within specific Regions, including recommendations concerning the development of Medical Missions, fundraising initiatives, public relations and communications initiatives, and Regional training needs.
(f) Criteria for Membership. Persons elected to membership on an RLC shall meet the following criteria:
(1) Be an Executive/National Director, or member of a Board of Directors of an Affiliated Entity;
(2) Have extensive knowledge of ICON Alliance;
(3) Understand the role and responsibilities of the RLCs;
(4) Be an effective advocate for the mission and Founding Principles of ICON Alliance; and
(5) Regularly attend or participate in meetings or conference calls convened by the RLC to which that person is elected to membership.

Section 3.06 Sub-Regional Leadership Councils.
ICON may periodically authorize the formation of one or more Sub-Regional Leadership Councils (**"SRLCs"**) to operate within a Sub-Region, on the same conditions as are identified in Section 3.05 concerning the formation, membership and operation of RLCs.

Section 3.07 Medical Advisory Committee.

(a) Purpose. The purpose of the Medical Advisory Committee is to conduct an ongoing review of the ICON Medical Handbook and make recommendations to ICON concerning amendments to the ICON Medical Handbook proposed by the Committee and/or by Affiliated Entities.
(b) Composition. The Medical Advisory Committee shall consist of members who are medical experts, physicians, allied health professionals, Executive/National Directors of Affiliated Entities or members of ICON's Board. Committee members shall be drawn from Affiliated Entities throughout the world and shall be as geographically diverse and international in scope as is reasonably practicable. ICON's Board shall determine the size of the Medical Advisory Committee.
(c) Selection and Terms of Members. ICON's President, or his/her designee, shall appoint and may remove all members of the Medical Advisory Committee. In making these appointments, ICON may consider recommendations from Affiliated Entities or from other persons who participate in or are affiliated with ICON Alliance. Each member of the Medical Advisory Committee shall serve for a term of four (4) years. ICON's President will appoint a replacement for any Committee member who is unable or unwilling to complete his/her four-year term.
(d) Subcommittees. The Medical Advisory Committee shall form and maintain standing subcommittees for reviewing the rules concerning Tele-consultations and Medical Missions. The members of each subcommittee shall serve for terms of (4) four years, unless otherwise determined by ICON's President. Affiliated Entities and other participants, including members of Advisory Committees, may nominate proposed members of the subcommittees at any time, in order to ensure that all positions are filled to the greatest extent possible with qualified members.
(e) Requirements of ICON Medical Handbook. The ICON Medical Handbook contains additional provisions concerning the Medical Advisory Committee and its subcommittees, which address, among other things, the Committee's functional responsibilities, the procedures for adopting and modifying the ICON Medical Handbook, and the timetable for reviewing and adopting proposed amendments to the ICON Medical Handbook. The Medical Advisory Committee shall comply with these additional procedural provisions in conducting its affairs.

Section 3.08 Other Advisory Committees.
ICON may periodically authorize the creation of other Advisory Committees (including, but not limited to, other Leadership Councils) in addition to or in lieu of those expressly provided for in these General Rules, if ICON determines that their formation would be in the best interests of ICON Alliance. If ICON chooses to authorize the formation of any additional Advisory Committees (which may be organized according to functional responsibilities or other non-geographic lines), then at that time, ICON will determine how that new Advisory Committee will be required to handle the procedural and operational matters addressed in Section 3.04.

Section 3.09 Regional and World Conferences.
ICON shall be exclusively responsible for authorizing the conduct of Regional Conferences and World Conferences. In making decisions concerning Regional Conferences, ICON shall consider the recommendations of any Regional Leadership Council for the Region in which the Regional Conference would be held. ICON shall be solely responsible for reviewing and approving proposals from prospective COCs for hosting World Conferences. ICON shall also determine all conditions under which Regional Conference and World Conference will be planned, financed and conducted. In the case of Regional Conferences, ICON will make these decisions with input from the relevant Regional Leadership Council.

Section 3.10 Medical Missions and Trainings.
ICON shall be exclusively responsible for organizing and conducting, or for authorizing COCs or Affiliated Entities to organize and conduct, Medical Missions and trainings involving ICON Alliance professionals, held on a multi-jurisdictional, regional, or international basis. If ICON authorizes any COC or Affiliated Entity (or group of Affiliated Entities) to conduct any such Medical Missions or trainings, ICON will, at that time, specify in writing all terms and conditions for conducting that Medical Mission or training.

Section 3.11 Approval of Affiliated Entity Activities.
All activities conducted by Affiliated Entities as part of ICON Alliance are subject to review by ICON. ICON reserves the right to disaffiliate any Affiliate Entity or impose other sanctions as set forth in these General Rules, shall be subject to ICON's ongoing approval. ICON shall normally exercise this ongoing right of approval through the affiliation processes and policies provided for in Article 6. However, ICON reserves the right to exercise its approval powers in specific cases at any time, and outside of the routine schedule and system for granting or renewing affiliation, in order to process the various requests for ICON's approval which Affiliated Entities must obtain under these General Rules, and in order to respond to situations which are not addressed specifically in these General Rules, but which fall under ICON's overall authority over ICON Alliance, as provided in Sections 2.02 and 2.03.

Section 3.12 Broadcasting and Recording Matters.
(a) ICON's Authority. ICON shall be the sole and exclusive owner of all copyright and other intellectual property rights in all Conference and online activities and as such, ICON has the sole and exclusive right to license others to film, record and broadcast, whether on a live or pre-recorded basis, any audio, or visual, or digital signals (collectively, "**ICON Recordings**") of the Conference or of any ICON Alliance events associated with the Conferences or Medical Missions, such as official opening or closing ceremonies.
(b) Effect on Affiliated Entities and COCs. No Affiliated Entity or COC may grant, or purport to grant to any party (including without limit, any producer, director, radio broadcaster, over-the-air or cable television broadcaster, radio or television Alliance, or any Internet provider) any right of any kind to film, record, broadcast or otherwise disseminate any ICON Recordings without ICON's prior written consent, or to otherwise publish, display, or transmit ICON Recordings on or through computers, digital or analog modem signals or fiber optic signals, Internet sites, World Wide Web communications, Alliances or any other form of online or off-line communications or downloads without ICON's prior written consent.
(c) Recording Rights. No Affiliated Entity or COC shall, without ICON's prior written permission, either itself or by license to any other party, produce, promote, and/or sell any medical content of any kind, including without limit any CD, record, tape, Internet broadcast, digital video disk, or any other electronic media, whether now in existence or created in the future, for the benefit of ICON, ICON Alliance, any Affiliated Entity, or any COC.

Section 3.13 Registration and Protection of ICON Marks.
(a) ICON's Responsibilities. As the owner of the ICON Marks, ICON is responsible for registering, protecting and enforcing all of ICON's ownership and related rights to the use of the ICON Marks and the goodwill and value associated with them. ICON is therefore exclusively responsible for registering or recording all trademarks, service marks, copyrights, and all other recordable interests in any intellectual property comprising the ICON Marks with the appropriate legal or governmental entities throughout the world, and for filing and prosecuting all actions against third parties for misappropriation, infringement or other misuse of the ICON Marks or other intellectual property associated with ICON Alliance.
(b) Effect on U.S. Organizations. No U.S. Entity (or Sub-Entity registered by a U.S. Entity as permitted by these General Rules), Sub-Region or U.S.-based Advisory Committee may register any ICON Mark or any copyright which is owned by ICON or which is related to or to be used in connection with ICON Alliance with any non-government entity, with any state or local governmental authority or with the United States Patent and Trademark Office without ICON's prior written consent. In addition, no U.S. Organization, Sub-Entity within a U.S. Region, Sub-Region or U.S.-based Advisory Committee may file or prosecute any claim for misappropriation, infringement or other misuse of the ICON Marks or other intellectual property associated with ICON Alliance without ICON's prior written consent.
(c) Effect on Other Organizations and Related Parties. No National Organization, Regional Organization, Sub-Entity, Region or Sub-Region Regional Leadership Council, International Advisory Committee or any other committee established by Affiliated Entities, Regions or ICON or by authority of these General Rules may register any ICON Mark or any copyright which is

owned by ICON or which is related to or to be used in connection with ICON Alliance, with any non-government entity, with any national or local governmental authority or with any multi-national or international tribunal responsible for the recordation, cataloging or enforcement of trademarks or copyrights without ICON's prior written consent. In addition, no National Organization, Regional Organization, Sub-Entity, Region or Sub-Region, nor any of the other councils or committees described in the preceding sentence may file or prosecute any claim for misappropriation, infringement or other misuse of the ICON Marks or other intellectual property associated with ICON Alliance without ICON's prior written consent. ICON will, however, consider requests from specific National Organizations and Regional Organizations for authorization to proceed with such registration or enforcement activities in the name of and on behalf of ICON, if ICON determines that granting such authorization is a more efficient and expedient method, in a particular instance, of protecting the ICON Marks and other intellectual property associated with ICON Alliance in areas outside of the United States.

Section 3.14 Official Languages.
ICON shall from time to time establish official languages to be used throughout ICON Alliance. The official language to be used in all communications between and among ICON and all COCs and all Affiliated Entities shall be English (the "**Official Business Language**"). Affiliated Entities shall be responsible for translating and distributing printed materials concerning that Affiliated Entity's conduct of the ICONs in Medicine Program (collectively, "**Program Materials**") into the most predominant language(s) spoken in that Affiliated Entity's country (or region), in order to facilitate efforts at public education and at increasing the number of general Members, Volunteers and Requestors who participate in ICON Alliance. ICON reserves the right, however, to inspect such translations and/or to require an Affiliated Entity to provide ICON with an English version of some or all of that Affiliated Entity's Program Materials, in order to enable ICON to confirm that such Program Materials conform to the English version issued by ICON. If there is any conflict between the non- English translation of any Uniform Standards or Program Materials and the English version, the English version shall control and take precedence.

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Section 4.01 Requirements for Members.
(a) General Membership. General Membership is available to the public through the Icons in Medicine website http://www.iconsinmed.org. All individuals in the iCons in Medicine program must become general members and agree to the ICON Service Agreement.
(b) Membership for Volunteers. An ICON Volunteer should be licensed to practice medicine in the jurisdiction in which they reside and agree to respond to a minimum of three consult requests per year. ICON Volunteers must enroll under the auspices of a Chapter (Section 5.01 (e)). ICON chapters represent that their members are duly licensed health care professionals.
(c) Required Affirmation for Volunteers
Each Volunteer must agree to the following Affirmation:
"I represent and warrant that I am a physician or health care practitioner, licensed to practice medicine in my local jurisdiction and possess the licensure, skills and other qualifications necessary in my locale to render the professional care about which I am providing advice. I understand that I am being contacted as an ICON Alliance volunteer to act as a consultant only, and to provide knowledge and expertise to the requesting health care provider in order to assist that individual in rendering improved patient care. I acknowledge and agree that as an ICON Alliance volunteer I will have no contact with any patients and that any advice I render

shall not be construed to establish a physician-patient relationship with the requesting health care provider's patient."

(d) Membership for Requestors. An ICON Requestor should be licensed to practice medicine in the jurisdiction in which they work and should provide services to underserved or remote populations. A Requestor must be enrolled in the iCons in Medicine program through the organization for which they work. This ICON Member Organization (Section 5.01 (d)) may be an NGO, clinic, Ministry of Health or other non-profit organization whose mission is compatible with ICON. Member Organizations represents that Requestors are authorized providers for an underserved community.

(e) Required Disclaimer for Requestors

Each Requestor must agree to the following Disclaimer:

"I represent and warrant that I am a physician licensed to practice medicine in my local jurisdiction and possess the licensure, skills and other qualifications necessary in my locale to render the professional care about which I am seeking advice. I understand and that I am contacting an ICON physician to act as a consultant only, and to provide his or her knowledge and expertise to me such that I am better able to render patient care. I acknowledge and agree that the ICON physician is limited in his or her ability to provide accurate advice based on the information I provide, and in providing any advice shall incur no liability for the outcome of any care I provide. I further acknowledge and agree that the ICON physician will have no contact with my patient and any advice rendered by such physician shall not be construed to establish a physician-patient relationship between the ICON physician and my patient."

ARTICLE 5

Governance and Operation of Affiliated Entities

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Section 5.01 Structural Requirements of Affiliated Entities.
(a) Generally. Each Affiliated Entity shall have and maintain, as a condition for obtaining and maintaining its affiliation under Article 6, an organizational form and structure that is sufficient and appropriate, in ICON's judgment, to enable that Affiliated Entity to meet its affiliation obligations and the requirements of these General Rules and other Uniform Standards.
(b) National and Regional Organizations. National and Regional Organizations are responsible for enrolling Chapters and Member Organizations within their geographic jurisdictions. Unless otherwise authorized by ICON, each National/Regional Organization shall be organized as an independent charitable entity, in accordance with the laws of its country's jurisdiction. Wherever possible and permissible under applicable law, a National/Regional Organization shall be established and operated as a separate and identifiable non-profit corporation or association, or other legally independent non-profit entity, which is managed and operated by a Board of Directors/National Organization; and obtain and maintain all available exemptions from taxation to the greatest extent permitted by the laws of that National/Regional Organization's jurisdiction.
(1) Program Oversight. Each National/Regional Organization shall establish a subcommittee of the Board of Directors, or an Advisory Committee, and appoint a staff member, or Executive/National Director, to oversee ICON program activities. ICON may, at its discretion, approve a different oversight structure for a particular National/Regional Organization at the time that ICON grants or renews that National/Regional Organization's affiliation, depending on its stage of development. If the role of a National/Regional Organization is to be conducted by a governmental agency or medical federation, ICON will normally require, as a condition of obtaining and maintaining affiliation, that the governmental entity or medical federation establish an Advisory Committee and appoint a Executive/National/Regional Director that focus specifically on the conduct of the Icons in Medicine Program in accordance with Section 5.01(b)4.
(2) Composition and Membership of the ICON Oversight Committee. The oversight Committee of a National/Regional Organization shall have at least five (5) members including a Chair, Medical Director and Secretary.
(3) Rotation of Members of Oversight Committee. The National/Regional Organization shall require systematic rotation in the membership of the Oversight Committee consistent with the total length of service of any one member of its Oversight Committee to a maximum of ten (10) consecutive years. A National/Regional Organization may request an exception to the ten-year maximum service for an Oversight Committee member who has an exemplary record of service. To obtain such an exception, an National/Regional Organization shall submit a written request (specifying the person for whom the exception is requested, describing that person's service to its Oversight Committee, the justification for the extension, and the length of the requested extension, provided that in no event may any person serve on its Oversight Committee for more than eighteen (18) consecutive years) to the ICON Managing Director for the National/Regional Organization's Region, who shall forward the request together with the Managing Director's recommendation to ICON's President, who shall consider the request and if the President believes that the request should be granted. No more than twenty percent of the members of any National/Regional Organization's Oversight Committee shall be granted such exceptions.
(*4) Delegation of Authority to Executive/National Director and Medical Director.* The day-to-day operations of each National/Regional Organization with respect to the iCons in Medicine program shall be managed by an Executive/National/Regional Director, who shall be a qualified person appointed by the National/Regional Organization's Board of Directors. This Executive/National Director must have the authority and responsibility to manage the day-to-day affairs of the ICON program as required by these General Rules and the other Uniform Standards. The Executive/National Director must be subject to the supervision and control of the National Organization's Board of Directors, and must meet the requirements specified in the

Affiliation Standards. The Executive/National Director may be part-time or full-time, volunteer or paid, but cannot be the same person as the Chair of the Oversight Committee or the same person as the Medical Director. The Medical Director may be part-time or full-time, volunteer or paid but cannot be the same person as its Chair of the Oversight Committee. ICON may assist Affiliated Entities in selecting respective Chairs, Executive/National Directors and Medical Directors by providing information concerning desirable qualifications for the position, and if known to ICON, information concerning potentially suitable candidates.

(5) Oversight Committee Meetings. The Oversight Committee of each National/Regional Organization shall meet and conduct its business as required by the Affiliation Standards. Meetings are to be held at least twice each calendar year.

(6) Other Committees. The Board of Directors of each National/Regional Organization shall establish other subcommittees or advisory committees to create and work with Chapters and Member Organizations, as its Board of Directors deems appropriate.

(7) Flexibility in Specific Instances. ICON may, in its discretion, allow an entity seeking to obtain or renew its affiliation greater flexibility concerning its structure and governance and permit that entity to vary from particular requirements of this Section 5.01, if ICON determines that such flexibility is warranted in view of the specific conditions confronting the entity, and if ICON is satisfied that the structure and governance arrangements being proposed for the entity offer sufficient assurance that it can fulfill its obligations to ICON under the Affiliation Standards, the obligations being undertaken by the entity in its Affiliation License, and these General Rules.

(c) U.S. Organizations. ICON may affiliate with U.S. National or State Organizations which are separately incorporated as a non-profit corporation under the laws of a state, and qualify for and obtain tax-exempt status under Section 501(c)(3) of the Internal Revenue Code of the United States. The requirements are the same as those for National/Regional Organizations, Chapters, or Member Organizations depending on the role.

(d) Member Organizations (Requestors). Member organizations first affiliate with ICON Medicine program and then, through a designated contact, enroll staff to receive services. Member Organizations have their own profile section on the ICON website. Unless otherwise authorized by ICON, each Member Organization shall be registered by a National Organization, Regional Organization or U.S. Organization in its jurisdiction, taking into account the legal requirements of its jurisdiction, and the role, if any, to be played by the national government in that jurisdiction. Unless otherwise authorized by ICON, the Member Organizations shall be an established independent charitable entity, in accordance with applicable law. Wherever possible and permissible under applicable law, a Member Organization shall: (1) be an established and operating separate and identifiable non-profit corporation or association, or other legally independent non-profit entity, which is managed and operated by a Board of Directors/Member Organization; and (2) have and maintain all available exemptions from taxation to the greatest extent permitted by the laws of that Member Organization's jurisdiction.

(e) Chapters (Volunteers). A Chapter consists of three (3) or more professionally licensed physicians or health care professionals, who form a group to facilitate their volunteer efforts under the leadership of a Medical Director selected by the group. Chapters are responsible for recruiting and ensuring that their members meet enrollment criteria.

(1) Chapters within U.S. Organization. Chapters registered to operate within the U.S. may not be separate legal entities. Rather, each Chapter shall be operated as a division or branch of the registering U.S. Organization, in order to ensure that the registering U.S. Organization maintains full control over the assets and operations of its Chapters.

(2) Chapters within National Organization or Regional Organization. Chapters registered to operate within the jurisdictions of National Organizations or Regional Organization may not be separately incorporated or otherwise organized into unincorporated associations or other entities having a separate and distinct legal status or identity from that of the registering National Organization or Regional Organization without ICON's prior written approval. Rather, each Chapter shall be operated as a division or branch of the registering National Organization or Regional Organization, in order to ensure that the registering Affiliated Entity maintains full control over the assets and operations of its Chapters.

Section 5.02 General Requirements Concerning the iCons in Medicine Program.

Each Affiliated Entity shall comply with the requirements set forth in Articles 6 and 7 concerning the conduct of the iCons in Medicine Program (e.g., Tele-consultations and Medical Missions), and with the other Uniform Standards which pertain to the iCons in Medicine Program. These obligations include, but are not limited to, compliance with all required procedures applicable to that Affiliated Entity concerning the registration of Volunteers and the proper use of those Volunteers.

Section 5.03 Growth Requirements for ICON Alliance.
(a) Required Scope of the iCons in Medicine Program. Each Affiliated Entity shall offer tele-consultations within its jurisdiction as well as other ICONs in Medicine Program initiatives such as medical missions, tele-consultation training, training programs, volunteer leadership programs and other programs as may be determined to be appropriate.
(b) Program Development System. The Program Development System is a management tool created to support ICON's global vision of a comprehensive, quality ICON Alliance development. The goal is to enable ICON Alliance leadership to bring longer term focus to key development areas and to ensure continuing success in delivering quality Tele-consultation training and Medical Missions to ICON Alliance. The Program Development System provides a systematic approach to quality development through a 3-step process: collection of essential program data and metrics; assessment of the current state of the program's development across a set of components; and creation of an Action Plan with targeted performance metrics and identification of resources to support future program growth. It is the policy of ICON that each Affiliated Entity shall increase the number of ICON Alliance Members participating in the ICONs in Medicine Program, particularly in its Tele-consultation activities and shall keep ICON regularly informed of its progress concerning growth. Through the Program Development System, each Affiliated Entity shall establish at least annual specific development targets including the number of new Chapters and Member Organizations it anticipates recruiting and how it proposes to reach the established goal.
(c) Approved Methodologies for Measuring Growth. In counting and reporting to ICON on the numbers of Chapters and Member Organizations who participate in an Affiliated Entity's activities, each Affiliated Entity shall use a standardized methodology developed and approved by ICON, unless ICON authorizes a particular Affiliated Entity to depart from that standardized methodology. Such methodology shall include provisions for measuring attrition of incumbent Chapters and Member Organizations. In addition, the data used by each Affiliated Entity to calculate and report to ICON on the total population of patients eligible in its jurisdiction to receive services from ICON Alliance shall be subject to ICON's review and approval. ICON shall provide definitions, clarification and directions as it deems appropriate concerning the counting and reporting and may revise such definitions from time to time. Such revisions shall not be considered an amendment to the General Rules.

Section 5.04 Use of ICON Name and Other ICON Marks.
Each Affiliated Entity shall comply with the requirements of these General Rules and the other Uniform Standards in its use of the **ICON** Logo and any other ICON Marks which ICON licenses that Affiliated Entity to use. Affiliated Entities shall also comply with the limitations imposed by these General Rules and the other Uniform Standards when authorizing third parties to use any ICON Marks in connection with activities undertaken for the support or benefit of that Affiliated Entity. Without limiting the intended generality of the preceding sentences, Accredited Entities must comply with the following requirements concerning the name "ICON", the **ICON** Logo, and any other ICON Marks which ICON licenses an Affiliated Entity to use:
(a) Compliance with Graphics Standards Guide. Affiliated Entities shall comply with the specifications in the Graphics Standards Guide concerning the authorized methods for using, printing, displaying and reproducing the **ICON** Logo, and various other ICON Marks.
(b) Use of the ICON Logo. Each Affiliated Entity shall have the right to use the **ICON** Logo only when the **ICON** Logo is used or displayed in conjunction with, or juxtaposed with, the Credit Line (i.e., the **ICON** Logo is used immediately above or next to the Credit Line, in the manner depicted in and required by the Graphics Standards Guide). No Affiliated Entity shall

have any right to use or display the **ICON** Logo standing alone, without the required juxtaposition with the Credit Line, nor may any Affiliated Entity authorize any Sub-Entity or other third party to make any such "stand-alone" use of the **ICON** Logo. Affiliated Entities shall use the **ICON** Logo in conjunction with the Credit Line, and use all other ICON Marks which ICON licenses Affiliated Entities to use from time to time, only in accordance with the Graphics Standards Guide, these General Rules, and the other Uniform Standards. No logo, trademark, service mark, design, insignia, seal or symbol other than the **ICON** Logo or the Credit Line may be used by an Affiliated Entity without ICON's prior written consent.

(c) Acknowledgment of ICON's Trademark Registrations. Affiliated Entity must identify the **ICON** Logo and any other ICON Mark which has been registered or otherwise recorded by ICON with the appropriate trademark authorities as the registered trademark or service mark of ICON, by always displaying that ICON Mark in conjunction with the registered trademark symbol (®) in the manner required by the Graphics Standards Guide, if that ICON Mark is a registered trademark of ICON. Alternatively, if the ICON Mark in question is a common law or other unregistered trademark or common law service mark of ICON, as indicated by ICON in the Graphics Standards Guide or through other written notice to Affiliated Entities, then Affiliated Entities shall always display that ICON Mark in conjunction with the common law trademark notice (TM) or, if applicable, the common law service mark notice (SM), in the manner required by the Graphics Standards Guide or ICON's other written notice to Affiliated Entity concerning the authorized use and display of that ICON Mark. The ICON Mark is defined, individually and collectively, as: (1) the mark and name "ICON" regardless of how that name is used or displayed, and specifically, whether or not it is used by itself or with ICON's name, the name of an Affiliated Entity, the name or logo of a COC, or the name of an ICON Alliance event; (2) the ICON Logo; (3) any Conference or COC logo, slogan or theme used by ICON, a COC or an Affiliated Entity; (4) The Law, (5) any figures or logos used by ICON or any COC as symbols for medical specialty consultations; and (6) any other mark, name, logo, emblem, slogan, motto, depiction or other expression which ICON has approved for use in connection with ICON Alliance, for which ICON has filed ownership registration(s) with the U.S. Patent and Trademark Office and/or any other trademark registration entity or governmental authority, or which ICON determines has become identified and associated with ICON Alliance through repeated usage in connection with the ICON Alliance programs or events.

(d) Approval Requirements. An Affiliated Entity must approve, in advance and in writing, the form, content and appearance of all designs, uses, displays and reproductions of ICON Alliance name, the **ICON** Logo, or any other ICON Mark which is to be used by its Sub-Entities or by any other third party under authorization from the Affiliated Entity. All such uses or reproductions by Sub-Entities or by third parties shall comply with the Graphics Standards Guide and the other Uniform Standards.

(e) Required Use of ICON Logo. Each Affiliated Entity shall use the **ICON** Logo in conjunction with the name of the Affiliated Entity on all official materials pertaining to ICON Alliance, including, without limitation, on its stationery, business cards, news release letterhead, Conference collateral, posters, brochures, and all informational and promotional material distributed to participants in ICON Alliance, to sponsors, or to the general public.

(f) Use of Official Credit Line. The official credit line to be used by all Affiliated Entities (the **"Official Credit Line"**) consists of the phrase Affiliated with International Consultants in Medicine. The Official Credit Line shall be displayed prominently on all stationery, brochures, annual reports, news releases, and other printed materials, on Web sites and in films, slides or video presentations, which are produced or distributed by Affiliated Entities pertaining to ICON Alliance. When feasible, the Official Credit Line should also be included in television credits displayed in connection with any programming which is filmed and broadcast by a local station within an Affiliated Entity's jurisdiction.

(g) Compliance with Other Policies. All uses of ICON Marks by an Affiliated Entity shall comply with all other requirements of these General Rules and the other Uniform Standards, including, but not limited to, the policies set forth in Section 5.05 concerning the prohibited association of ICON Marks or the **ICON** Program with alcoholic beverages or tobacco products.

(h) Displays of Commercial Messages at Conferences. ICON, a COC, or an Affiliated Entity may display, or permit others to display, signage recognizing the support of commercial

sponsors at Conferences pertaining to ICON Alliance in appropriately designed locations, so long as such displays otherwise comply with the General Rules and the other Uniform Standards.
(i) Prohibition and Display of National Flags. No national flags shall be displayed at any Conferences.

Section 5.05 Alcohol and Tobacco Policy.
(a) Use of Alcoholic Beverages and Tobacco Products. No Affiliated Entity shall knowingly permit the use of any alcohol or tobacco products at any Conference venue.
(b) Prohibitions Concerning Affiliations of ICON Name or ICON Marks with Alcoholic Beverages and Tobacco Products. No Affiliated Entity shall permit the name "ICON", "ICON Alliance," the **ICON** Logo or any other ICON Mark to be publicly or visibly connected or associated with the name or trademark of any of the following companies or products:
(1) any tobacco product, or the manufacturer or distributor of a tobacco product; or
(2) any alcoholic beverage, or the manufacturer or distributor of an alcoholic beverage.
(c) Permitted Activities. The prohibition set forth in Section 5.05(b) shall not prevent an Affiliated Entity from engaging in or authorizing any of the following:
(1) Accepting a so-called "blind" contribution which is not publicized, promoted or publicly acknowledged by the Affiliated Entity in any way (except to the extent that the source of the contribution must be reported on tax returns or other filings made with governmental authorities, which are then available for public inspection);
(2) Allowing the name "ICON," the **ICON** Logo, and/or other ICON Marks to be publicly associated with the names of products which are not tobacco products or alcoholic beverages, even if they are manufactured or distributed by companies which also manufacture or distribute tobacco or alcoholic beverages;
(3) Allowing the name "ICON," the **ICON** Logo, and/or other ICON Marks to be publicly associated with the names of manufacturers or distributors of alcoholic beverages or tobacco products, as distinguished from the products or the product names themselves, if those company names do not contain the brand name or generic title of an alcoholic beverage or tobacco product.
(d) Obtaining Required Guidance from ICON. An Affiliated Entity shall contact ICON for guidance and further authorization in any instance where it is uncertain whether an Affiliated Entity may accept funds or other support from a company associated with tobacco products or alcoholic beverages. ICON's decision on such matters will be final and binding on the Affiliated Entity.

Section 5.06 Compliance with Laws.
Each Affiliated Entity shall conduct its affairs and operate the ICONs in Medicine Program within its jurisdiction in accordance with all laws and regulations which may govern or apply to its activities, including, but not limited to, all laws and regulations concerning: (a) non-profit corporate or other organizational status or governance; (b) obligations concerning income, payroll and other types of taxes, and requirements for obtaining and maintaining exemption from income taxation; (c) revenue and expenditure reporting; (d) fundraising activities, including laws and regulations which govern charitable solicitation and/or cause-related marketing promotion activities; (e) auditing, preparing and/or filing financial statements and other required financial reporting to government authorities; (f) disclosure of information to members of the public; (g) occupational health and safety requirements; (h) the hiring, firing and selection of employees; (i) prohibitions against discrimination and requirements concerning equal opportunity in the hiring of employees and the conduct of the Affiliated Entity's affairs; and (j) procedures and policies concerning the use of volunteers.

Section 5.07 Contracts with Third Parties.
Affiliated Entities shall comply with the requirements in Article 8 concerning fundraising activities and the standards and conditions to be met or included in all agreements with corporate sponsors or other third parties that provide financial support or services for the Affiliated Entity for ICON Alliance Programs. No Affiliated Entity shall enter into any contract

with any third party pertaining to ICON Alliance which has a term or duration which extends beyond its then-current Affiliation Period without ICON's prior written consent, as further provided in Section 8.04(k), except that any contract may have a term or duration beyond a its then-current Affiliation Period if the contract provides that it shall terminate without penalty or other cost to Affiliated Entity or ICON effective upon the third party's receipt of written notice from the Affiliated Entity or ICON if the Affiliated Entity's Affiliation is revoked, denied, not renewed, or suspended for any reason by ICON.

Section 5.08 Avoiding Conflicts of Interest.
In order to preserve the integrity and reputation of ICON Alliance and the ICONs in Medicine Program, it is imperative that ICON and all Affiliated Entities including their respective Board of Directors, officers Executive/National Directors, committee members and employees, shall scrupulously avoid conflicts of interest pertaining to ICON Alliance, whether real or potential, between their own personal and financial interests, or the interests of companies or businesses in which they have an interest, and the interests of the Affiliated Entity in which they are an officer, Executive/National Director, member of the Board of Directors, or employee. The preceding sentence obligates all Affiliated Entities to avoid not only actual conflicts in situations in which there is a true conflict between competing interests, but also to avoid conflicts which are "potential," in that they may create an appearance of impropriety, and thus risk public embarrassment to ICON or damage to its reputation, even if there is no actual impropriety or conflict. To meet this requirement, all potential conflicts pertaining to ICON Alliance shall be disclosed fully and promptly to the Board of Directors of the affected Affiliated Entity for resolution by that Board of Directors (or, where applicable, by ICON's Board) at the earliest opportunity. If any Affiliated Entity, Sub-Entity, or ICON official or employee has a doubt about whether a particular situation creates a potential conflict of interest, that doubt shall be resolved, in all instances, in favor of disclosing the potential conflict as required by this Section.

Section 5.09 Financial and Insurance Requirements.
All Affiliated Entities shall comply with the Affiliation Fee and insurance requirements of Article 9.

Section 5.10 Guidelines and Policies.
ICON may from time to time issue written guidelines or policies on matters related to the operation or management of Affiliated Entities with respect to ICON Alliance. ICON may require that Affiliated Entities comply with such policies and guidelines as a condition of obtaining and maintaining their affiliation.

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Section 6.01 Purpose of Affiliation and Registration.
ICON licenses National Organizations, Regional Organizations and U.S. Organizations or others as necessary under the General Rules to grow ICON Alliance. ICON National Organizations, Regional Organizations and U.S. Organizations register Chapters (Volunteers) and Member Organizations (Requestors). Affiliation and registration are u sed to promote worldwide quality, and ulti mately the g rowth, of ICON Alliance. Affiliation assures that every Affiliated Entity agre es to participate in ICON Alliance in a ma nner consistent with ICO N Alliance's mission, is will ing and abl e to over see registration of Chapte rs and Member Organizations within its ju risdiction, and has met ce rtain minimum management and fin ancial requirements.

Section 6.02 Rights.
Only those organizations and entities which have been granted the status of Affiliated Entities

as provided in this Article 6 may: (a) hold themselves out to the public as ICON Affiliated Entities; (b) raise, receive or spend funds in for ICON Alliance; or (c) use, or authorize others to use in conducting their programs or activities, the name "ICON" as part of their name or any other ICON Marks that ICON licenses Affiliated Entities to use in conducting the ICONs in Medicine Program or activities.

Section 6.03 Authority to Grant Affiliation and Registration.
Only ICON may grant or withhold affiliation to a Founding Committee or to a requesting national or regional organization. ICON has sole authority to suspend or revoke the affiliation of an Affiliated Entity. Affiliated Entities may grant or withhold registration to a Chapter or Member Organization (Sub-Entity) within its jurisdiction. ICON may also suspend or revoke the registration of any Sub-Entity under Sections 6.21(d). Subject to ICON's right to suspend or revoke a Sub-Entity's registration, Affiliated Entities are responsible for deciding, consistent with the requirements of this Article 6, whether to grant initial or renewal registration to their Sub-Entities.

Section 6.04 Documentation of Affiliation.
Whenever ICON grants an affiliation license, ICON shall issue an Affiliation License to that entity. Affiliation by ICON shall be in writing, and shall be made in accordance with the requirements of these General Rules.

Section 6.05 Affiliation Standards.
ICON shall establish, and may amend, from time to time the Affiliation Standards.

Section 6.06 Changes to the Affiliation Standards.
ICON may revise the Affiliation Standards from time to time. Except in unusual cases, ICON will provide Affiliated Entities with advance written notice of any revisions to the Affiliation Standards, in order to give Affiliated Entities affected by the changes a reasonable opportunity to take any action necessary to satisfy the revised Affiliation Standards. In unusual cases, however, when ICON determines that it is in ICON Alliance's best interest to rapidly implement the revised Affiliation Standard(s), ICON will notify all Affiliated Entities, specifying in that notice the date by which they will be required to satisfy the revised Affiliation Standard(s). The specified date may, if deemed appropriate by ICON, and specified in that notice, apply to all Affiliated Entities regardless of the length of their Affiliation Period.

Section 6.07 Period or Duration of Affiliation.
(a) Calendar Year Basis. ICON shall normally grant affiliation to an Affiliated Entity on a calendar year basis. Affiliation may take effect at any time during a calendar year, but will expire at the end of a calendar year. An Affiliated Entity, subject to Section 6.07(d), may grant registration to a Sub-Entity only on a calendar year basis.
(b) Duration of Affiliation. ICON may grant or renew affiliation (subject to ICON's right to suspend or revoke affiliation) for periods ranging from one year, or a portion thereof, to two years. Duration of affiliation (the **"Affiliation Period"**) shall be specified by ICON in writing at the time of new or renewed affiliation.
(c) Conditional Affiliation. ICON may grant affiliation on a conditional basis (**"Conditional Affiliation"**), which shall include a specific date by which the conditions must be satisfied. If an Affiliated Entity fails to fulfill a required condition by the specified date, its affiliation shall automatically terminate as of that date, with no right of appeal, unless otherwise agreed by ICON.
(d) Duration of Registration for Sub-Entities. Absent prior written approval from ICON in specific cases, the Registration Period for any Sub-Entity, whether constituting an initial or renewal Registration Period, may not extend beyond the then-scheduled expiration of the Registration Period of its registering Affiliated Entity.

Section 6.08 Application for Initial or Renewed Affiliation.
(a) Requirements for Written Application. A Founding Committee or an Affiliated Entity

seeking initial or renewed affiliation, respectively, shall file a written application using standardized application materials provided by ICON (the **"Affiliation Application"**), which must include a completed Affiliation License. Every Affiliation Application must be signed on behalf of the Founding Committee or the Affiliated Entity's Board of Directors. Affiliation Applications from Founding Committees shall include the Organizational Documents that the Founding Committee has adopted or proposes to adopt if affiliation is granted by ICON. Renewal Applications from Affiliated Entities shall include written confirmation on behalf of its Board of Directors that the organization remains committed to ICON Alliance mission and principles, including these General Rules

(b) Timeline for Renewal Application. Unless otherwise permitted by ICON, each Affiliated Entity that seeks to renew its affiliation shall submit its completed Affiliation Application to ICON no later than the date established from time to time by ICON during the calendar year in which that Affiliated Entity's existing affiliation expires, in order to gain affiliation effective January 1 of the following calendar year. Any Affiliated Entity unable to comply with this deadline must submit a written extension request to ICON at least thirty (30) days prior to the date that Affiliated Entity's affiliation expires. Upon good cause, ICON may then establish an alternative deadline.

(c) Failure to Submit Renewal Application. If an Affiliated Entity fails to submit a complete Affiliation Application in accordance with this Section 6.08, such Affiliated Entity's affiliation shall automatically expire at the end of the latter of its current Affiliation Period or any extension granted by ICON in accordance with Section 6.08(b), without the right to appeal, unless otherwise authorized by ICON. An Affiliated Entity shall not have the right to appeal a notice from ICON stating that its affiliation has expired.

Section 6.09 Affiliation License.

(a) Requirement of Completion. Each Affiliation Application, whether for initial or renewed affiliation, shall be accompanied by an Affiliation License by which the applicant certifies the applicant's acceptance of and compliance with the General Rules. Each applicant's Affiliation License shall be signed by an authorized representative. ICON will not grant or renew affiliation to any applicant that has not properly completed and signed an Affiliation License.

(b) Changes to Affiliation License. ICON may revise the Affiliation License at any time and shall provide Affiliated Entities with prompt written notice of all such changes. Except for exceptional cases, ICON will not require an Affiliated Entity that is otherwise in compliance with its Affiliation License to make changes to its structure, operations or programs during its then-current Affiliation Period in order to meet the requirements of a revised Affiliation License. Rather, ICON will normally require Affiliated Entities to sign and submit the revised Affiliation License as part of their next Affiliation Application following ICON's adoption of the revised Affiliation License.

Section 6.10 Review by ICON of New Affiliation Applications.

(a) Review of New Applications. ICON will review all Affiliation Applications from Founding Committees and either grant or deny such applications by written or electronic notice to the applicant. ICON's decisions on all requests for such affiliation shall be final and non-appealable. A Founding Committee that has been denied affiliation may, with ICON's prior written authorization, resubmit a revised Affiliation Application at a later date to provide ICON with new or additional information.

(b) Granting Affiliation. ICON may, at its sole discretion, grant conditional affiliation in accordance with Section 6.07(c). ICON shall grant affiliation for a specified period in accordance with Section 6.07(b), or waivers in accordance with Section 6.22.

Section 6.11 Affiliation Boundaries.

ICON shall determine the territorial jurisdiction of each Affiliated Entity for activities pertaining to ICON Alliance. In most cases, the jurisdictional boundaries of an Affiliated Entity will be geographic and political, and will mirror existing geopolitical boundaries, such as the boundaries defining a nation or province, or a state within the United States. ICON will identify the jurisdiction of each Affiliated Entity in writing at the time that ICON grants or renews its

affiliation. In appropriate cases, ICON reserves the right to designate more than one Affiliated Entity within a particular geographic or political territory, such as more than one Affiliated Entity for a single nation or for a single state within the United States.

Section 6.12 Obligations of an Affiliated Entity.
By applying for and accepting affiliation, and by signing the Affiliation License, an Affiliated Entity and its Board of Directors agree to recognize ICON as the final legal and binding authority on all ICONs in Medicine Program matters and accept full responsibility for conducting the operations of the Affiliated Entity in accordance with its Affiliation License, these General Rules and the other Uniform Standards.

Section 6.13 Rights of an Affiliated Entity.
An Affiliated Entity has the following rights and privileges during its Affiliation Period, subject to these General Rules:
(a) License to Use ICON Marks. Each Affiliated Entity is granted a license to use the **ICON** Logo, the Credit Line and other ICON Marks as set forth in Section 5.04 or as above specified from time to time by ICON, in organizing, financing and conducting the ICONs in Medicine Program within its jurisdiction.
b) Authority to Operate the ICONs in Medicine Program. ICON authorizes each Affiliated Entity to hold itself out as the authorized ICON Alliance member within its jurisdiction (subject to any jurisdictional rights that the Affiliated Entity may have granted to a Sub-Entity). This authority grants each Affiliated Entity the following rights and authority within its jurisdiction, to be exercised in accordance with the General Rules:
(1) A license to authorize others to use the ICON Logo and Credit Line.
(2) To organize, conduct and promote the iCons in Medicine Program Tele-consultations, including organizing and registering Sub-Entities (Chapters and Member Organizations) located entirely within its jurisdiction;
(3) To organize, conduct and promote Medical Missions and Conferences
(4) To carry out related program activities authorized by ICON, including volunteer leadership initiatives and Tele-consultation training programs;
(5) To raise funds for these purposes in the name of the Affiliated Entity;
(6) Eligibility to receive a quota to send a delegation to World Conferences and to certain Regional Conferences;
(7) To permit license for local radio and television broadcasters and other third parties to film and otherwise record the Conference held by the Affiliated Entity within its jurisdiction, and to broadcast such Conference Recordings (as defined in Section 3.12) on local radio within the Affiliated Entity's jurisdiction;
(8) To select an Executive/National Director, to hire employees and to establish a personnel system for ICONs in Medicine Program within its jurisdiction as supported by its operating budget;
(9) To receive assistance from ICON in the form of advice and training regarding the development and conduct of the ICONs in Medicine Program, access to official ICON publications and materials, opportunities to attend Conferences, and eligibility to request financial assistance from ICON; and
(10) The opportunity to comment on and participate in the development of the Uniform Standards through representational participation on Leadership Councils and other Advisory Committees established through these General Rules.

Section 6.14 ICON's Power to Impose Sanctions for Violations of an Affiliated Entity's Obligations.
ICON has the right and the authority to impose sanctions or other corrective measures deemed appropriate by ICON on any Affiliated Entity, or against any other party to the extent permitted by law, for violations of the General Rules or the other Uniform Standards. ICON's authority to enforce the General Rules and other Uniform Standards includes, without limitation, the authority to suspend, revoke or deny the affiliation of any Affiliated Entity and to impose any of the other sanctions provided in Article 6 (or elsewhere in these General Rules).

Section 6.15 Grounds for Imposing Sanctions or Revoking/Denying Affiliation.
(a) Grounds for Sanction. Except as otherwise provided in subsection (b), ICON may impose any or all of the sanctions identified in Section 6.20 if ICON determines that an Affiliated Entity is not in compliance with the requirements of these General Rules or other Uniform Standards (**"Ground(s) for Sanction"**). Any affiliation that lapses or expires automatically under this Article 6 is not a sanction and shall not be subject to appeal under Section 6.15 through 6.17.
(b) Grounds for Revocation or Denial of an Affiliated Entity's Affiliation.
Notwithstanding ICON's general power to sanction an Affiliated Entity as provided in this Article 6, ICON shall not revoke an Affiliated Entity's affiliation unless ICON makes one or more of the following determinations (the **"Ground(s) for Revocation"**):
(1) That the Affiliated Entity has failed to comply with its material obligations as an Affiliated Entity, which are set forth in these General Rules, the Affiliation Standards and Affiliation License of the affected Affiliated Entity, or the other Uniform Standards;
(2) That circumstances exist wherein (i) the health or safety of individuals involved in ICON Alliance is jeopardized; (ii) there are indications that the Affiliated Entity has engaged in any illegal activity; or (iii) the Affiliated Entity has acted in a manner that may jeopardize the financial integrity or reputation of the Affiliated Entity, of the ICONs in Medicine Program or ICON, and that these circumstances may lead to substantial harm to ICON, to ICON Alliance, to the ICONs in Medicine Program, or to any of ICON's affiliates if not eliminated or rectified as soon as possible; or
(3) That the Affiliated Entity does not meet the Affiliation Standards.

Section 6.16 Procedures for Imposing Sanctions/Revocation.
(a) Notice of Intent to Impose Sanctions/Revocation. If ICON determines there are Grounds for Sanction and/or Grounds for Revocation, ICON shall notify the affected Affiliated Entity through a "**Notice of Intent to Impose Sanctions**" or "**Notice of Intent to Revoke**", respectively. The relevant Notice shall be addressed and sent to the Affiliated Entity. It shall summarize the Affiliated Entity's operating deficiencies, failures of performance, or other violations of the Uniform Standards which constitute the Grounds for Sanction and/or Grounds for Revocation. ICON may also, at its option, inform the Affiliated Entity of the specific sanction(s) that ICON may impose. The Notice of Intent to Revoke will specifically state, however, whether ICON has determined that there are Grounds for Revocation and intends to suspend, deny or revoke the Affiliated Entity's affiliation.
(b) Effect of an Affiliated Entity's Failure to Respond. The Notice of Intent in 5.16(a) shall include a notice that the Affiliated Entity may respond to the allegations within 30 calendar days following the Affiliated Entity's receipt of said Notice (**"Response"**) and that failure to respond may result in the immediate imposition of sanctions/revocation. If an Affiliated Entity fails to submit a Program Response within the thirty days following its receipt of the Notice of Intent to Impose Sanction, then such Notice shall automatically become a final notice and the decision to impose the proposed sanction(s) **("Final Sanction Notice")** upon expiration of that thirty-day response period. If the Notice of Intent to Impose Sanction did not specify the sanctions, ICON shall have the right, upon the expiration of the thirty-day response period, to issue an unappealable Final Sanction Notice to the affected Affiliated Entity identifying the sanction(s) which ICON has determined to impose. In a similar manner, if the Affiliated Entity fails to provide a Program Response to a Notice of Intent to Revoke that cited Grounds for Revocation and specifically notified the affected Affiliated Entity that ICON was considering a suspension, revocation or denial of its affiliation, then upon the expiration of the thirty-day response period and the lack of a Response from the Affiliated Entity, that Notice of Intent to Revoke shall automatically become a Final Notice of Revocation, with the consequences provided for in Section 6.18.
(c) Required Contents of Affiliated Entity's Response. Any Affiliated Entity's Response to either of the Notice(s) of Intent in 6.16(a) shall be in writing and prepared in English or translated into English before its submission to ICON. The Response shall be submitted to ICON within the 30-day response period described in Section 6.16(b) and shall set forth the specific reasons why the Affiliated Entity either (1) denies the alleged Grounds for Sanction or

Grounds for Revocation, and/or (2) believes that any conceded Grounds for Sanction or Grounds for Revocation have either been corrected or eliminated, can be corrected or eliminated in the near future within a reasonable period of time or should not, for other reasons explained by the Affiliated Entity, result in the imposition of sanctions by ICON. If the Affiliated Entity proposes corrective measures, its Response shall include a detailed plan for that correction and an estimate of the amount of time reasonably necessary to accomplish it. A Response may also challenge the existence of the alleged Grounds for Sanction/Revocation, challenge the appropriateness of any proposed sanction(s)/revocation, or challenge both the violation and the proposed sanction(s)/revocation.

(d) ICON's Review of the Affiliated Entity's Response. Within 30 days following ICON's receipt of a Response, ICON shall review the Response and provide a written reply to the Affiliated Entity. ICON's reply may either: (1) withdraw the Notice of Intent in Section 6.16(a); (2) defer a final decision on the Notice of Intent to Impose Sanction to permit the Affiliated Entity to take specific future corrective action, in which case ICON shall specify in writing the nature and completion date of such corrective action; or (3) issue a Final Notice of Sanction under Section 6.16(e) below, or if applicable, a Final Notice of Revocation under Section 6.16(f) below. ICON shall determine, in its sole discretion, whether to accept any corrective action taken or proposed by an Affiliated Entity.

(e) Final Notice of Sanction. If ICON, after review and consideration of the Affiliated Entity's Response (and, where applicable, after evaluation of any corrective measures taken by the Affiliated Entity with ICON's authorization under Section 6.16(d) above), determines that Grounds for Sanction continue to exist, ICON shall send the Affiliated Entity a Final Notice of Sanction. It shall be addressed and sent to the chairperson of the Board of Directors of the affected Affiliated Entity and copied to its Executive/ National Director. It shall describe the nature of, and reasons for, the imposed sanctions and take effect 30 days after the date on which it is issued by ICON, unless within that same thirty-day period, the affected Affiliated Entity submits a written appeal of the Final Notice of Sanction to ICON in accordance with Section 6.17(a).

(f) Final Notice of Revocation. In a case in which ICON has found Grounds for Revocation, if ICON determines, after review and consideration of the Affiliated Entity's Response (and, where applicable, after evaluating the impact of any corrective measures taken by the Affiliated Entity with ICON's authorization under Section 6.16(d) above), that Grounds for Revocation continue to exist, ICON shall send the Affiliated Entity's Executive/National Director and the chairperson of its Board of Directors a Final Notice of Revocation. It shall set forth ICON's reasons for revoking or denying affiliation, and the reasons why any Response and, where applicable, any corrective measures taken by the Affiliated Entity following issuance of the Notice of Intent to Revoke, were insufficient in ICON's judgment to warrant maintaining or renewing the Affiliated Entity's affiliation. ICON's Final Notice of Revocation shall take effect thirty (30) days after the date on which ICON issues the Final Notice of Revocation, unless within that same thirty-day period, the affected Affiliated Entity submits a written appeal in accordance with Section 6.17(a).

Section 6.17 Appeal Procedures for Sanctions/Revocation.

An Affiliated Entity which is the subject of a Final Notice of Sanction or Final Notice of Revocation may pursue an appeal of ICON's decision by following the procedures in this Section 6.17.

(a) Submitting an Appeal. Only one (1) appeal may be filed by an Affiliated Entity in connection with any Sanction or Revocation process **("Appeal")**. The Appeal may not be filed until after ICON has issued a Final Notice of Sanction or a Final Notice of Revocation. The Appeal shall be submitted in writing (in English) and shall have been approved by a majority of the members of the Affiliated Entity's Board of Directors, and shall be submitted to ICON's President and to the ICON Chair. An Appeal may challenge i) the existence of the violations or other factors described in the Grounds for Sanction or Grounds for Revocation, ii) the appropriateness of the sanctions identified in ICON's Final Notice of Sanction or Final Notice of Revocation, or iii) both i) and ii).

(b) Size and Composition of the Appeal Committee. Each Appeal shall be considered by a

committee of five (5) persons, consisting of the ICON Chair and four other persons appointed by ICON's President (**"Appeal Committee").** Alliance ICON shall determine in its sole discretion, through its President, whether to appoint a standing Appeal Committee for purposes of this Section 6.17, or whether to appoint different Appeal Committees to handle particular Appeals.

(c) Review by Appeal Committee. Each Appeal shall be decided by a simple majority of the five members of the Appeal Committee. Before making its decision, the Appeal Committee shall give the Board of Directors of the affected Affiliated Entity a reasonable opportunity to discuss the Appeal in person with the Appeal Committee, if the Affiliated Entity requests such an opportunity in its written Appeal, but the Affiliated Entity shall be responsible for any travel or other expenses incurred by its representative(s) in attending such a meeting. The Appeal Committee may, in its discretion, request the Affiliated Entity to provide supplementary information in support of the Appeal, or to respond to specific questions of significance to the Appeal Committee in preparing its decision. The affected Affiliated Entity shall cooperate with such requests as a condition of pursuing its Appeal.

(d) Decision of Appeal Committee. The Appeal Committee shall issue its decision in writing and include a brief statement of the reasons for its decision, and shall promptly communicate that decision both to ICON's President and to the Board of Directors of the affected Affiliated Entity. The decision of the Appeal Committee shall be final.

Section 6.18 Emergency Suspension of Affiliation.

Notwithstanding any other provision of this Article 6, ICON may issue a written emergency temporary suspension of affiliation if ICON determines that such action is reasonably necessary in order to prevent immediate and substantial harm to ICON or any of its Affiliated Entities, or to the conduct of the ICONs in Medicine Program within the affected Affiliated Entity's jurisdiction **("Emergency Suspension Notice")**. The decision whether to suspend affiliation on an emergency basis shall be made by ICON's President or Chair. Suspension of online activities shall be immediate and suspension of all other activities shall be effective upon receipt by the Executive/National Director and the chairperson of the Board of Directors of the affected Affiliated Entity. The Emergency Suspension Notice shall specify the specific reasons for the emergency suspension. Upon receipt of an Emergency Suspension Notice, the affected Affiliated Entity shall immediately comply with Section 6.18. Emergency Suspension Notices shall remain in effect until withdrawn by ICON or until a Final Notice of Revocation is issued by ICON as provided in Section 6.16. An affected Affiliated Entity may appeal an Emergency Suspension Notice through the process outlined in Section 6.17 only after the affected Affiliated Entity receives a Final Notice of Revocation. An affected Affiliated Entity shall not regain valid affiliation unless and until ICON withdraws the emergency suspension by written notice to the affected Affiliated Entity.

Section 6.19 Effect of Termination or Expiration of Affiliation.

If an Affiliated Entity's affiliation is revoked, denied or suspended on an emergency basis, or if an Affiliated Entity ceases, for any reason, to be affiliated in accordance with these General Rules (individually and collectively, a **"Termination of Affiliation"**), then ICON and the affected Affiliated Entity shall observe the following:

(a) Termination of License to Use ICON Marks. Upon the effective date of Termination of Affiliation, the affected Affiliated Entity's Affiliation License, including its rights and authority to use the name "ICON," the **ICON** Logo, any ICON Marks, and all other copyrighted materials or other intellectual property owned by ICON, shall immediately terminate, without any further notice or action by ICON. The termination of the rights and authority granted pursuant to the Affiliation License, shall not release the Affiliated Entity from fulfilling any lawful and outstanding contractual obligations to third parties which were entered into by the Affiliated Entity in accordance with the General Rules.

(b) Termination of Authority to Conduct ICONs in Medicine Program and Activities. Upon the effective date of Termination of Affiliation, the affected Affiliated Entity shall immediately cease all ICONs of Medicine Program and fundraising activities in the name of or for the benefit of ICON Alliance, and shall conduct only those limited activities and operations which

ICON determines to be necessary and appropriate, with the supervision and approval of ICON.
(c) Cooperation with ICON. Upon the effective date of Termination of Affiliation, the affected Affiliated Entity shall promptly take whatever steps may be reasonably required by ICON to facilitate ICON's affiliation of a new Affiliated Entity in its jurisdiction. Such steps shall include measures reasonably designed to ensure that all funds, in-kind donations, personal property, intellectual and other intangible property, and all other assets of any type which were acquired by the affected Affiliated Entity through its affiliation with ICON Alliance, are made available, within that jurisdiction, in accordance with ICON's directives for the organization and conduct of ICON Alliance.
(d) ICON's Enforcement Options. ICON shall have the right, either before or after a Termination of Affiliation, to obtain specific performance, by court order if necessary, of an affected Affiliated Entity's obligations under these General Rules and other Uniform Standards, or to seek comparable equitable or legal relief which may be available to ICON under applicable law. In addition, ICON shall have the right to enforce restrictions on the use of the name "ICON," the **ICON** Logo any other ICON Mark, or any copyrights or other intellectual property owned by ICON, by pursuing whatever remedies may be available to ICON under applicable law. ICON's decision not to suspend, revoke or deny affiliation of an Affiliated Entity or to impose other sanctions shall not preclude ICON from suspending, revoking or denying affiliation or imposing such sanctions at a later date. Further, ICON's decision under circumstances that would justify such action to not impose any specific sanctions shall not constitute a waiver by ICON of any right ICON may have to pursue or prevent ICON from pursuing, at any time, other legal or equitable remedies available to ICON under applicable law.

Section 6.20 Sanctions Available to ICON.
(a) ICON's Power to Devise and Impose Sanctions. ICON shall have broad discretion, limited only by these General Rules and applicable law, to determine the nature and duration of sanctions ICON may elect to impose on an Affiliated Entity pursuant to this Article 6 if ICON determines that Grounds for Sanction exist. ICON shall be entitled to consider, in addition to any other factors which it deems relevant, the following: (1) the severity and duration of the Program's acts or omissions; (2) the degree of cooperation (or lack of cooperation) provided by the Affiliated Entity; (3) the extent to which the Grounds for Sanction have created risks for the health or well-being of patients or jeopardized the legitimate interests of other Affiliated Entities; (4) the extent to which the Grounds for Sanction are in part the product of circumstances which are or may be beyond the reasonable control of the Affiliated Entity; (5) the progress, if any, being made by the Affiliated Entity in its good-faith efforts to remedy the cited violations, and the likely effect of the proposed sanction on the operations of the Affiliated Entity; (6) the need for a strong response to deter the Affiliated Entity from future violations; and (7) the need for a strong response in order to deter other Affiliated Entities from similar future violations.
(b) Types of Sanctions Available to ICON. ICON may in its sole discretion impose, but is not limited to, any or all of the following sanctions for an Affiliated Entity as to which ICON determines that Grounds for Sanction exist **(not** in a particular order of severity or priority):
(1) Place an Affiliated Entity on probation for a specified period of time and require the Affiliated Entity to correct during that probationary period the violations cited in ICON's Notice of Intent to Impose Sanction or be subject to further sanction(s);
(2) Suspend the Affiliated Entity's eligibility to receive grants from ICON for defined periods of time, or until the Grounds for Sanction are corrected or eliminated;
(3) Reduce or eliminate any funds the Affiliated Entity would receive from ICON, until such time as the affected Affiliated Entity corrects or eliminates the Grounds for Sanction;
(4) Conduct, at the expense of the affected Affiliated Entity, a comprehensive independent financial audit of the Affiliated Entity's operations;
(5) Assemble and deploy an **"Emergency Review Panel,"** to conduct a comprehensive on-site evaluation of the Affiliated Entity's operations, and to report regularly to ICON concerning those operations until the Grounds for Sanction are corrected or eliminated;
(6) Require the Executive/National Director of the affected Affiliated Entity and/or other staff of the Affiliated Entity to attend specific training programs conducted by other Affiliated Entities which ICON determines to be relevant and useful for avoiding future violations by the affected

Affiliated Entity; and/or
(7) Deny or revoke the affiliation of the affected Affiliated Entity in accordance with this Article 6.

Section 6.21 Registration of Sub-Entities.
(a) Responsibilities of Affiliated Entities. Affiliated Entities must maintain proper and ongoing supervision and control over the operations of Sub-Entities. All registered Sub-Entities shall be structured, managed and operated in accordance with these General Rules and the other Uniform Standards. An Affiliated Entity's failure to ensure its respective Sub-Entity(s) compliance with the General Rules and the other Uniform Standards may constitute Grounds for Sanction or Revocation, Denial or Termination of Affiliation of the Affiliated Entity by ICON.
(b) Registration Standards and Procedures. Unless otherwise approved by ICON in writing in a specific instance, all Sub-Entities shall be registered and re-registered in accordance with the same standards and procedures. As provided in Section 6.07, however, a Sub-Entity's registration period cannot extend beyond the expiration of the Affiliated Entity's Affiliation Period. Affiliated Entities that have or plan to have Sub-Entities shall translate and adapt standardized registration applications and licenses for the use of their Sub-Entities which conform substantially to ICON's standard Registration Application and Registration License.
(c) Review of Sub-Entity Registration.
1) Chapters. Each Affiliated Entity that has registered one or more Chapters in its jurisdiction shall establish an effective system for conducting annual reviews of all aspects of the Chapter's operations, including its organization, governance, programs, progress in recruitment of Volunteers, fundraising activities, accountability, public relations and public education efforts, adherence to the Uniform Standards, and other criteria not inconsistent with the Uniform Standards which the registering Affiliated Entity considers essential for the proper operation of its Chapter(s).
2) Member Organizations. Each Affiliated Entity that has registered one or more Member Organizations in its jurisdiction to receive ICONs in Medicine Program services shall establish an effective system for conducting annual outreach including newsletters, annual reports, and online surveys in order to establish the needs of Member Organizations and the efficacy of ICON Alliance outreach efforts.
(d) Revocation, Denial or Suspension of Revocation. Affiliated Entities are responsible in the first instance for taking steps to revoke, deny or suspend the registration of any of its Sub-Entities whenever there are Grounds for Revocation as provided in Section 6.15. Every Affiliated Entity shall exercise this oversight and control in a diligent and effective manner, as a condition of maintaining its own affiliation. If, however, ICON determines that there are Grounds for Revocation with respect to a particular Sub-Entity, ICON shall have the right to suspend or revoke the registration of that Sub-Entity in accordance with these General Rules, whether or not it's registering Affiliated Entity has or is willing to take such action. In any case, all actions and procedures for suspending, revoking or denying the registration of a Sub-Entity, whether taken by ICON or by the Affiliated Entity which originally registered the Sub-Entity, shall conform to the requirements of this Article 6.

Section 6.22 Waivers of Non-Compliance with General Rules.
ICON may, upon receipt of a written request from an Affiliated Entity, grant that Affiliated Entity a written waiver for its non-compliance with one or more specific provisions of these General Rules or with one or more specific Affiliation Standards (a "**Compliance Waiver"**) if ICON determines, in its sole discretion, that a Compliance Waiver is appropriate because: (a) the Affiliated Entity cannot comply with the cited General Rules provision or particular Affiliation Standard without violating specific national laws which apply to that Affiliated Entity's operations; (b) compliance with the cited General Rules provision or particular Affiliation Standard would cause significant hardship for the Affiliated Entity; and/or (c) the Affiliated Entity, although unable to comply for justifiable reasons with the literal requirements of the cited General Rules provision or Affiliation Standard, is nevertheless in compliance with the intent of the relevant provision, or is able and willing to achieve that compliance in an alternative manner acceptable to ICON. Any Compliance Waiver issued by ICON shall be in writing and valid only for a stated period of time to be determined by ICON. The process described in this Section

6.22 for obtaining Compliance Waivers is not intended as a means for avoiding the imposition of sanctions under this Article 6, or as a means for seeking exceptions from provisions of the General Rules or other Uniform Standards with which an Affiliated Entity may disagree. Rather, the Compliance Waiver process shall be used by ICON solely as a vehicle for granting narrow exceptions to Affiliated Entities in rare and isolated cases when the strict application or enforcement of these General Rules or the Affiliation Standa rd would unduly burden an Affiliated Entity or produce other results unintend ed by ICON, or require an Affiliated Entity to choose between complying with the Uniform Standards or complying with applicable national or local law.

ARTICLE 7
ICONs in Medicine Program Activities: Tele-consultations, Medical Missions, Conferences and ICON Online Resource Center

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Section 7.01 Founding Objectives of iCons in Medicine Program Activities.
The ICONs in Medici ne Program activities includes four key subcomponents: Tele-consultations using iConsult software, Medical Missions, Conferences and ICON Online Resource Center a s well as other a ctivities such as relate d training a nd fundraising as established and administered for ICO N Alliance with a view toward achieving the following objectives:
(1) Promoting ICON Alliance as a voluntary consultant-centered Alliance, in which Members can serve as Volunteers or request tele-consultations as Requestors are at the center of each of the co re activities of t he iCons in Medicine Program as described above and in which Volunteers and Requestors are p rovided meaningful opportunities to participate in additional activities that address health disparities and support ICON Alliance programming;
(2) Helping to develop the social , professional, and intellectua l awareness and capabilities of each Member;
(3) Promoting the spirit of healing and a love of p articipation in medicine for its own sake, by stressing and celebrating the im portance of, a nd the personal achievement associated with, each Volunteer's participation and personal effort in ICON Alliance;
(4) Encouraging all Volunteers to address health disparities and provide assistance to Member Organizations while b uilding national and inte rnational bridges in m edicine, by providi ng opportunities to do so and the necessary structure, support and appreciation;
(5) Increasing public awareness of the impact of health disparities and the ne eds of Member Organizations, and publ ic support for ICON Alliance, by encouraging participation in ICON Alliance by physicians, allied health professionals, health care providers, civic organi zations, corporations, and othe r civic, governmental, social or medically-oriented constituencies within the community at large; and
(6) Promoting and reflecting the values, standards and traditions embodied in a ncient and modern traditions of he aling in all ICO N Alliance a ctivities, while broadening and enri ching these traditions to incorporate appropriate telecommunications and information technologies so as to enhance the dignity, self-esteem and health of patients.

Section 7.02 Prohibition on Charging Fees.
No Affiliated Entity, Chapt er or Mem ber Organization may requi re patients o r their families to pay or promise to pay any type of fee, or ch arge of any type, as a condition for receiving services from ICON Alliance (coll ectively, **"Prohibited Fees"**). The preceding sentence does not prohibit an Affiliated Entity from charging regi stration fees to its Sub-Entities to help defray the cost of a dministering those Sub-Entities in accordance with these General Rules, so long as the amount of any such registration fee is reasonable and is approved by ICON, and so long as the Sub-Entity required to pay th at fee does not charge or accept any Prohibited Fees from patients or their families.

Section 7.03 iCons in Medicine Program Activities: Tele-consultations, Medical Missions, Conferences and the iCon On-line Resource Center.
(a) Authority. The ICONs in Me dicine Program's Tele-consultations, Medical Missions and Conferences may be conducted only by or und er the auspices and direct supervision of ICON or an Affiliated Entity. No Affiliated Entity ma y permit or engage any third party to conduct or

organize any Tele-consultations, Medical Missions or Conferences, for or on behalf of that Affiliated Entity.

(b) Standards. All ICONs in Medicine Program Tele-consultations, Medical Missions and Conferences activities and events shall be conducted in accordance with these General Rules, the ICON Medical Handbook, and the other Uniform Standards. Each Affiliated Entity shall offer Tele-consultations, Medical Missions and Conferences which meet the highest possible standards. Each of these ICONs in Medicine Program activities must be held in a manner which protects the health and safety of its participating Members as well as the recipients of services.

(c) Range of Programming Offered. Each Affiliated Entity shall endeavor to offer a variety of activities pertaining to the ICONs in Medicine Program, including one or more Conferences. The scope of the programs offered by each Affiliated Entity shall be consistent with the ICON Medical Handbook and should foster participation by all eligible Volunteers and Requestors and should address identified health disparities. These programs should include, to the extent possible, the traditional components of the ICONs in Medicine Program, e.g., Tele-consultations, Medical Missions, and Conferences (which are described throughout this Section).

(d) Public Education and Promotion. Each Affiliated Entity and COC shall use its best efforts to generate coverage by local news media, in order to increase public awareness of health disparities and support for ICON Alliance.

(e) Medical and Safety Requirements - Generally. Affiliated Entities and COCs shall take all reasonable steps to protect the health and safety of its Members and staff in all activities pertaining to the ICONs in Medicine Program. Affiliated Entities and COCs shall also adhere to the medical and safety requirements set forth in the ICON Medical Handbook in all activities pertaining to the ICONs in Medicine Program. In addition, Affiliated Entities and COCs must comply with the following minimum standards (in addition to the tele-consultation-specific requirements of the ICON Medical Handbook), unless ICON grants written authorization to a particular Affiliated Entity or COC to depart from one or more of these requirements in a specific instance.

Section 7.04 Requirements Concerning Registering as a Chapter.

(a) Minimum Requirements for Chapters. Each group of health care professionals volunteering to provide tele-consultations within ICON Alliance must be registered as a Chapter by the appropriate Affiliated Entity within its jurisdiction. This registration shall be completed through the online registration process of the ICONs in Medicine Program. No health care professional can be enrolled to receive tele-consultants or other services until the Chapter is registered and subsequently approves of the enrollment of those health care professionals.

(b) Minimum Requirements for Enrolling as a Volunteer. In order to volunteer services for Tele-consultations or Medical missions within ICON Alliance, Volunteers must first enroll through a general Member and then enroll in a Chapter which has been registered with an Affiliated Entity. Health care professionals are eligible to enroll with a Chapter under the following conditions:

(1) Volunteers must be trained, licensed health care professionals.

(2) Volunteers must commit to responding to three (3) requests for consultations each year in their area of specialty.

(3) Volunteers must agree to communicate directly online through the iConsult program to communicate with the Members seeking consultations.

(4) Volunteers agree to being approached to consider participation in Medical Missions.

(5) Volunteers agree to the use of their images and likeness for matters related to ICON Alliance.

(6) Volunteers must affirm that they are licensed as health care professionals in their jurisdiction and that they will not enter a physician/patient relationship per the following statement on the enrollment form (see Section 4.01(c)).

(c) Enrolling as a Volunteer through a Registered Chapter. ICON and Affiliated Entities shall create an online enrollment process for new Volunteers as outlined in the ICON Medical Handbook.

(d) Enrollment Ceremonies. ICON, Affiliated Entities and Chapters may hold enrollment ceremonies either in person or online.
(e) De-Registration of Chapters. ICON and Affiliated Entities may de-register Chapters for violating rules established in the ICON Medical Handbook. All de-enrolled Chapters should be de-enrolled by their Affiliated Entity through the online process in the manner outlined in the ICON Medical Handbook. Volunteers are automatically de-enrolled if their Chapter is de-registered.
(f) De-Enrollment of Volunteers. ICON, Affiliated Entities and Chapter Medical Directors may de-enroll Volunteers for violating rules established in the ICON Medical Handbook. All de-enrolled Volunteers should be de-enrolled by their Chapter through the online process in the manner outlined in the ICON Medical Handbook. However, they can apply for re-enrollment through another Chapter if eligible.
Section 7.05 Requirements Concerning Registration as a Member Organization.
(a) Minimum Requirements for Member Organizations. Each organization seeking services from ICON Alliance must be registered by the appropriate Affiliated Entity within its jurisdiction to become a Member Organization. This registration shall be completed through the online registration process of the ICONs in Medicine Program. No health care professional can be enrolled to receive Tele-consultants or other services until the Member Organization is registered and subsequently approves of the enrollment of that health care professional.
(b) Minimum Requirements for Enrolling as a General Member. Once registered, each Member Organization that seeks ICONs in Medicine Program services for its trained, licensed health care professionals shall require that each individual health care professional first enroll as a general Member through the ICONs in Medicine Program's online registration process prior to participation in the Tele-consultations.
(c) Enrolling as a Requestor through a Registered Member Organization.
Once enrolled as a general Member, an individual may enroll as a Requestor of Tele-consultation services through his/her Member Organization. Once approved, this will allow access to the list of Volunteers available through ICON Alliance. The required procedure for completing that enrollment through the ICONs in Medicine Program's online process is as follows:
(1) Health care professionals may enroll online on the same day they request a consult (but before they request a consult), by providing ICON or the appropriate the Affiliated Entity with their full name, Member Organization ID, complete address, and telephone number.
(2) Members agree to the use of their images and likeness for matters related to ICON Alliance.
(3) All Requestors seeking tele-consultation support through the iCons in Medicine Program shall be required to review and agree to, before the start of their participation, a disclaimer concerning their general role and responsibilities as well as the role of ICON Alliance Volunteer (see Section 4.01(e)).
(d) De-Registration of Member Organizations. ICON and Affiliated Entities' Medical Directors may de-register Member Organizations for violating rules established in the ICON medical handbook. All de-registered Member Organizations should be de-registered by the registering body online in the manner outlined in the ICON Medical Handbook. Members are automatically de-enrolled if their Member Organization is de-registered. However, they can apply for re-enrollment through another Member Organization if eligible.
(e) De-enrollment of Requestors. ICON, Affiliated Entities, and Member Organizations may de-enroll Requestors for violating rules established in the ICON medical handbook. All de-enrolled Requestors should be de-enrolled by the enrolling body online in the manner outlined in the ICON Medical Handbook. Requestors are automatically de-enrolled if their Member Organization is de-registered. However, they can apply for re-enrollment through another Member Organization if eligible.

Section 7.06 Classification of iCons in Medicine Tele-consultations.
The Medical Specialties in which ICON Alliance Volunteers are given the opportunity to consult in are divided into two general classes, consisting of the Recognized Specialties and the Offered Specialties as defined below. In general, when a requisite number of Volunteers, as determined by ICON, has signed up to participate as consultants in a Recognized Specialty,

ICON will make it available as an Offered Specialty to Member Organizations. ICON has the ultimate authority to determine how and when to classify medical, or health specialty areas, as either Recognized Specialties or Offered Specialties.

(a) Recognized Specialties. Recognized specialties are medical or health related specialties which ICON has recognized as being part of the iCons in Medicine Program's Tele-consultations. ICON's classifications of recognized Medical Specialties are binding on all Affiliated Entities and Sub-Entities. Recognized Specialties include:

(1) **"Medical Specialties,"** which are presently classified by ICON as consisting of:

- Allergy and Immunology
- Anesthesiology
- Colon & Rectal Surgery
- Dermatology
- Emergency Medicine
- Family Medicine
- Internal Medicine
- Medical Genetics
- Neurological Surgery
- Nuclear Medicine
- Obstetrics and Gynecology
- Ophthalmology
- Orthopedic Surgery
- Otolaryngology
- Pathology
- Pediatrics
- Physical Medicine and Rehabilitation
- Plastic Surgery
- Preventive Medicine
- Psychiatry & Neurology
- Radiology
- Surgery
- Thoracic Surgery
- Urology

(b) Changes in Classification of Specialties. ICON may change or add to the specialties classified as Recognized Specialties under Section 6.06(a), using the procedures set forth in the ICON Medical Handbook for classifying Recognized Specialties.

(c) Offered Specialties. "Offered Specialties" are Recognized Specialties in which a requisite number (as determined by ICON) of Volunteers have offered to voluntarily provide tele-consultations so that tele-consults in that specialty area may be offered to Member Organizations as a service of ICON Alliance. ICON may classify various Specialties as "Offered Specialties" based on criteria and procedures set forth in the ICON Medical Handbook.

(d) Prohibited Cases. "Prohibited Cases" means those types of cases which ICON has determined, in consultation with the Medical Advisory Committee, do not meet ICON's minimum standards or which would otherwise expose ICON Alliance Volunteers to unreasonable liability. No Volunteer may offer any tele-consultations on cases which are of a nature that ICON has classified as a Prohibited. ICON has presently classified no cases as Prohibited. However, ICON may change or add to these classifications of Prohibited Cases at any point in time using the procedures specified in the ICON Medical Handbook.

Section 7.07 General Rules for the iCons in Medicine Program.

(a) Rules Set by ICON. ICON has the ultimate authority to determine what rules will govern the conduct of the iCons in Medicine Program cores, i.e., Tele-consultations, Medical Missions and Conferences in a particular Recognized Specialty. All such rules shall be published in the ICON Medical Handbook and disseminated to all Affiliated Entities.

(b) Tele-consultations and Medical Missions to be offered by Affiliated Entities to Member Organizations. Affiliated Entities shall identify and register organizations in their jurisdiction that are eligible to become Member Organizations in order for them to receive Tele-consultations and Medical Mission assistance from ICON Alliance. ICON may also identify and register organizations, in and across any and all jurisdictions, which meet the criteria for Member Organizations as set forth in these general rules, to receive assistance through ICON Alliance.

(c) Medical Missions and Other Events. ICON shall approve the Recognized Specialties to be featured during any Medical Missions held on a multi-jurisdictional, regional or international level. Medical Missions shall be conducted in accordance with the ICON Medical Handbook.

(d) Integration with Other Telemedicine and Medical Programs. Affiliated Entities should liaise with other telemedicine programs and encourage professionals in those programs to become ICON Alliance Members and to share their activities with other professionals through ICON Alliance. In addition, Affiliated Entities should work with other medical organizations to organize events at which ICON Alliance Members may share their activities and the activities of ICON Alliance with their colleagues.

Section 7.08 General Requirements Concerning Medical Missions.

Although largely a matter of emphasis, Medical Missions may be broadly divided into two categories: trainings and interventions. Training programs are predominantly designed to transfer skills and build local capacity while interventions place a greater emphasis on the one-time delivery of particular health services. Generally, intervention missions should focus on services that provide a definitive outcome, for example surgery or immunizations programs. Training missions, that often take place within the context of health care delivery, are usually more appropriate for addressing chronic or ongoing health concerns, like those surrounding disability or primary health care provision. Both training and intervention missions are best accomplished in the context of an ongoing relationship in which the mission is facilitated by telemedicine, tele-consultations or Internet based information exchange. Requirements for ICON Alliance Medical Missions are specified in the ICON Medical Handbook.

Section 7.09 Requirements Concerning Conferences.

All Conferences held or sponsored by ICON, an Affiliated Entity or a COC shall satisfy the following general requirements, except to the extent that an Affiliated Entity may be permitted to vary from one or more of these requirements by virtue of a waiver from ICON:

(a) Conference Focus. The focus for Conferences should be on the use of Appropriate Information Technology to address Health Disparities and build bridges in Medicine.

(b) Opportunities to Participate. Conferences and Medical Missions must offer opportunities for Members to present their experiences and needs.

(c) Scope and Frequency of Affiliated Entity Conferences. Each Affiliated Entity shall hold Conferences periodically and as frequently as practical, and with the greatest respect to the scope of the Conference opportunities offered as practical.

Section 7.10 Conduct of ICON-Lead World Conferences.

ICON shall determine all matters concerning the organization and conduct of World Conferences. Unless otherwise determined by ICON, the following general policies shall govern the conduct of World Conferences:

(a) Frequency. World Conferences shall be held every two years.

(b) Location. ICON shall determine the location of each World Conference, and shall select the site for each World Conference.

(c) Governing Rules. All World Conferences shall be conducted only with ICON's authorization, and in accordance with the ICON Medical Handbook, the World/Regional Conference Charter, and the other Uniform Standards.

Section 7.11 Conduct of ICON-Sanctioned Conferences.

ICON shall determine all matters concerning the organization and conduct of Regional Conferences, Multi-National Conferences and U.S. Multi-State Conferences (which are referred

to, individually and collectively, using the generic term "**Conferences**" in this Section 7.11). Unless otherwise determined by ICON, the following general policies shall govern the conduct of such Conferences:

(a) Frequency. Such Conferences may be held in accordance with whatever schedule ICON determines is in the best interests of ICON Alliance.

(b) Location. ICON shall determine the location of such Conferences. ICON shall also select and contract with any COC which is to be authorized by ICON to organize, finance and conduct such Conferences, or with any Affiliated Entity which is to have the responsibility for hosting or taking primary responsibility in planning such Conferences. ICON shall select the site for such Conference in accordance with the procedures and criteria specified in the World/Regional Conference Charter.

(c) Governing Rules. All such Conferences shall be conducted only with ICON's authorization, and in accordance with the ICON Medical Handbook, the World/Regional Conference Charter, and the other Uniform Standards.

Section 7.12 Invitational Conferences

(a) Affiliated Entities' Authority to Conduct. Affiliated Entities may only conduct their State or National Conferences as Invitational Conference to which Affiliated Entities are invited to attend (**"Invitational Conferences"**) with ICON's prior written authorization or in accordance with such written policies as ICON may adopt from time to time. If ICON authorizes a specific Affiliated Entity to hold its conference as Invitational Conferences, the requirements of this Section 7.12 shall apply to, unless otherwise indicated by ICON in its written directives to the Affiliated Entity regarding its authority to hold such Invitational Conferences.

(b) Sub-Entities' Authority. Sub-Entities are not eligible to host Invitational Conference unless otherwise approved by ICON in a specific instance. Invitations to attend Invitational Conferences shall not be distributed to, or accepted by, any Sub-Entity without ICON's prior written authorization.

(c) Purpose of Invitational Conferences. Affiliated Entities may be permitted to hold their conference periodically as an Invitational Conference in order to foster greater cooperation and exchange of information between Affiliated Entities within a particular Region, and in order to give new or developing Affiliated Entities the opportunity to learn and benefit from participation in the Conference of a more developed Affiliated Entity, particularly until that new Affiliated Entity reaches a point where it can conduct its own conferences. Notwithstanding the preceding sentence, the opportunity to participate in another Affiliated Entity's Invitational Conference is not, and may not be viewed as, a substitute for the obligation of the guest Affiliated Entity to conduct its own Conferences.

(d) Rules for Extending and Accepting Invitations.

ICON shall determine whether an Affiliated Entity is eligible to host or send or accept invitations to participate in Invitational Conferences. Unless otherwise authorized by ICON:

(1) Host Affiliated Entity. An Affiliated Entity may not host an Invitational Conference in any year in which a Regional or World Conference is scheduled to take place in any location falling within that Affiliated Entity's Region. Invitations may be issued by the hosting Affiliated Entity to no more than five (5) other Affiliated Entities unless ICON approves the issuance of invitations to additional Affiliated Entities. Invitations shall be extended only to the Executive/National Directors of other invited Affiliated Entities, and only to Affiliated Entities which are located in the same Region as the hosting Affiliated Entity.

(2) Guest Affiliated Entities. Affiliated Entities may accept only one invitation each year to participate in an Invitational Conference held by another Affiliated Entity (as determined by the date(s) of the Invitational Conference in question) unless otherwise approved by ICON. If ICON authorizes an Affiliated Entity to attend more than one Invitational Conference in a given one-year period, that Affiliated Entity shall take different participants to each Invitational Conferences, in order to maximize the number of its participants benefiting from attendance at Invitational Conferences.

(3) Special Invitations to Non-Affiliated Organizations. Affiliated Entities may not extend invitations to participate to any Sub-Entities, or to any club, organization or entity which has not been registered with ICON Alliance without ICON's prior written approval. In certain cases,

ICON may authorize an organization in a nation which has no Affiliated Entity to participate in an Affiliated Entity's Invitational Conference, as a means of working toward establishing an Affiliated Entity. In any case in which ICON authorizes such participation, ICON will so notify the hosting Affiliated Entity in writing, and outline for the attending organization all terms and conditions for that organization's participation in the hosting Affiliated Entity's Invitational Conference.

(e) Cost of Invitational Conferences. The hosting Affiliated Entity shall be solely responsible for all costs associated with the conduct of Invitational Conferences. No such costs shall be imposed on any guest Affiliated Entity without ICON's approval or without the prior written consent of the guest Affiliated Entity. However, each guest Affiliated Entity shall be solely responsible for all travel costs for its delegation to and from the site of the Invitational Conferences. Affiliated Entities that desire to attend an Invitational Conference are strongly encouraged to pay for the costs associated with that participation using funds raised specifically for that purpose, rather than funds which are otherwise needed to support that Affiliated Entity's annual operating budget.

(f) Procedures for Obtaining ICON Approval. Host and guest Affiliated Entities shall comply with the following procedures in seeking authorization from ICON to host or attend Invitational Conferences:

(1) Host Affiliated Entities. An Affiliated Entity desiring to host an Invitational Conference shall submit a written request to the ICON Regional Office for authorization to conduct its conference as an Invitational Conference, setting forth the date and location of that conference, the number and identity of the other Affiliated Entities to be invited and the number of guest Affiliated Entities projected to attend. All such information shall be submitted to ICON using a standardized form approved by ICON (the "**Invitational Conference Authorization Form**"). The Invitational Conference Authorization Form shall be submitted to ICON at least six (6) months before the scheduled start of the Invitational Conference. The applying Affiliated Entity shall specifically indicate on its Invitational Conference Authorization Form whether it seeks authorization from ICON for a departure from any of the requirements for an Invitational Conference set forth in this Section 6.12, and if so, the Affiliated Entity's basis for seeking that departure. ICON shall act promptly on each such request and shall notify the applying Affiliated Entity in writing of ICON's decision.

(2) Guest Affiliated Entities. All Affiliated Entities which have received and which desire to accept invitations to attend an Invitational Conference shall request ICON's authorization to do so by completing the Invitational Conference Authorization Form and submitting it to ICON no later than three months before the scheduled start of the Invitational Conference. ICON shall act promptly on each such request and shall notify each prospective guest Affiliated Entity in writing of ICON's decision.

Section 7.13 Invitational Medical Missions. The provisions of Section 7.12 shall apply as well to proposed **"Invitational Medical Missions,"** in which participants from other Affiliated Entities within a particular Region are invited to participate in the hosting Affiliated Entity's Medical Mission(s).

ARTICLE 8

Fundraising and Development

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Section 8.01 Division of Fundraising Responsibilities within ICON Alliance.
Each Affiliated Entity is solely responsible for raising the funds needed to pay for its own program and administrative operations. ICON is responsible for raising the funds needed for ICON's programs and administrative operations, as well as the worldwide expansion of ICON Alliance. ICON has the exclusive authority within ICON Alliance to conduct, or to approve arrangements for, a broad range of fundraising activities, including (but not necessarily limited to), those which are conducted on a worldwide, regional, or continental basis, or on a multi-Program basis, as provided in Section 8.02. Subject to ICON's exclusive authority as provided in these General Rules, Affiliated Entities have the authority to engage in or authorize certain types of fundraising activities conducted entirely within their respective geographic jurisdictions, as set forth in this Article 8.

Section 8.02 ICON's Exclusive Authority.
ICON has the exclusive right and authority to conduct (or to authorize third parties to conduct) any or all of the following activities for the purpose of raising funds for the benefit of ICON and/or ICON Alliance:
(a) Worldwide and World Conference Sponsors. To enter into all agreements and arrangements for
support from corporate and other organizational sponsors (collectively, **"Corporate Sponsorships"**) for ICON Alliance and for all World Conferences; ICON may authorize a COC to arrange for certain Corporate Sponsorships for World Conferences, on terms to be set forth in ICON's written contract with that COC concerning those World Conferences.
(b) Licensing Use of "ICON" Name. To enter into all agreements which contemplate or require that a corporate sponsor or any other third party be granted authorization to make any use of the name "ICON" either in marketing its own products or services (such as through a cause-related marketing promotion in which the public is informed that its purchase of a particular item will raise funds for ICON Alliance), in sponsoring a particular event, or in acknowledging its own support for ICON Alliance (such as where a sponsor publicizes that it is a supporter of "ICON").
(c) Multi-Jurisdictional Activities. To arrange for (or to approve in advance all agreements made by Affiliated Entities concerning) all fundraising activities, including but not limited to, Corporate Sponsorships, cause-related marketing promotions and/or fundraising or promotional events which will be conducted either: (i) on a worldwide basis; (ii) on a multinational basis through activities conducted in the jurisdictions of two or more National Programs; (iii) on a multi-state basis within the United States, through activities conducted in the jurisdictions of two or more U.S. Programs; or (iv) via the Internet or worldwide web.
(d) Regional Sponsors and Regional Conference Sponsors. To approve all Corporate Sponsorships for Regional Conference and Regional U.S. Conferences, Corporate Sponsorships of a particular Region or continent within a Region, and/or Corporate Sponsorships of two or more National Organizations, or of two or more U.S. Programs, whether or not those Corporate Sponsorship arrangements involve the sponsorship or support of Conferences; in the case of Regional Conferences, Multi-National Conference or U.S. Multi-State Conferences, ICON may authorize a COC, a hosting National Organization or a hosting U.S. Program (if applicable) to arrange for certain Corporate Sponsorships for such Conferences, on terms to be set forth in ICON's written contract with that COC or that hosting Affiliated Entity concerning those Conferences.

(e) Endowment Fundraising. To conduct (or to authorize third parties to conduct) all fundraising activities which are dedicated to or directed at the development of an endowment fund for the benefit of ICON Alliance.

(f) Foundation Grants. To approach and seek grants or other forms of funding from foundations, wherever located, which offer grants or other types of financial support to nonprofit organizations, except that Affiliated Entities may also seek such funding in accordance with Section 8.03(e).

(g) Planned and Deferred Gifts. To develop uniform written guidelines for soliciting and administering planned or deferred gifts or bequests from members of the general public (the **"ICON Planned Giving Guidelines"**) and to authorize the creation of any separate or discrete funds or trusts which seek to pool donations resulting from multi-state or multi-jurisdictional solicitations for ultimate redistribution among two or more Affiliated Entities, such as pooled income funds (**"Commingled Fund(s)"**); once ICON develops and issues the ICON Planned Giving Guidelines, any Affiliated Entity may solicit planned and deferred gifts and bequests within its jurisdiction, so long as such solicitations comply with the minimum requirements of the ICON Planned Giving Guidelines; in addition, ICON shall develop the ICON Planned Giving Guidelines, including guidelines concerning the permitted creation or use of Commingled Funds by Affiliated Entity, in collaboration with a Planned Giving Task Force to be appointed by ICON; the Planned Giving Task Force shall include representatives of Affiliated Entities with experience or interest in the solicitation of planned or deferred gifts or bequests.

(h) U.S. National and International Direct Marketing Activities; Centralized Direct Mail Program. To conduct, or to authorize third parties to conduct, all direct marketing fundraising projects for the benefit of ICON or ICON Alliance, including direct mail and telemarketing solicitations, on an international or regional basis, or nationally or on a multi-Program basis within the United States. Within the United States, ICON may conduct a national, centralized direct mail program (the **"CDMP"**) for the joint benefit of ICON and participating U.S. Programs, which may voluntarily elect to participate in the CDMP in lieu of conducting their own direct mail solicitations. ICON may also develop similar direct mail or other direct marketing programs on a national, Regional or global level, for voluntary participation by Affiliated Entities on terms to be set forth in agreements between ICON and each participating Entity.

(i) Internet, Online and Similar Methods of Fundraising. To make all arrangements concerning any fundraising activities which are to be undertaken for the benefit of ICON, or any Affiliated Entity or COC using the Internet, the World Wide Web, or any other form of international or interstate computer-based or telecommunications technology other than mere telephone solicitation, whether presently known or developed in the future, which involves the solicitation or receipt of contributions through computer-based marketing of goods or services, electronic mail messages to or from donors, online communications to a central area (such as an online service or the "home page" of an Affiliated Entity or third-party fund-raiser) (collectively, **"Electronic Fundraising"**). In order to promote uniform standards for all Electronic Fundraising conducted in the name or for the benefit of ICON Alliance, ICON shall provide written guidelines for all Affiliated Entities concerning the circumstances under which any Affiliated Entity may engage in Electronic Fundraising, in collaboration with an Internet Fundraising Task Force to be appointed by ICON. No Affiliated Entity shall engage in any Electronic Fundraising, or take any steps to develop its own "home page" or Internet address on or through the World Wide Web related to ICON Alliance, without ICON's prior written consent, unless those activities are authorized by, and are conducted in accordance with, ICON's written guidelines, and any Affiliated Entity that already has a home page or Internet address on the date this subsection takes effect shall comply with such guidelines as soon as practical after they are promulgated.

(j) Fundraising with Medical Associations or Corporations. To conduct or authorize any fundraising activities or promotional events which are sponsored by, or held with the support or participation of, medical or information technology associations, intergovernmental organizations or corporations such as the WMA, WHO, Pfizer, Merck, Google, Microsoft, etc. whenever such organizations or associations have operations or host events in more than one Affiliated Entity's jurisdiction, regardless of whether the proposed fundraising events or activities will be limited to a particular location or conducted on a multi- Program, regional or

international basis. (As provided in Section 8.03, an individual Affiliated Entity is not prohibited by this subsection from soliciting or accepting sponsorship support or other types of financial support from any corporations, organizations or from associations which are based entirely in its jurisdiction.)

(k) Other ICON Fundraising. In addition to ICON's exclusive authority under this Section 8.02, ICON also has the authority to conduct or authorize all other fundraising activities not specifically enumerated in this Section 8.02, including but not limited to cause-related marketing promotion projects, Corporate Sponsorship arrangements, special events, and workplace and payroll-deduction giving, except that ICON's authority in these areas is nonexclusive to the extent that Affiliated Entities have the express authority under Section 8.03 to conduct certain types of fundraising within their respective geographic jurisdictions.

Section 8.03 Authority of Affiliated Entities.

Each Affiliated Entity is authorized to engage in the types of fundraising activities described in this Section 8.03, but only if and to the extent that: (i) all programs, events, activities, and promotions associated with such fundraising activities are conducted entirely within the Affiliated Entity's jurisdiction; (ii) no agreements made by the Affiliated Entity with third parties concerning such activities shall extend beyond the scheduled expiration of that Affiliated Entity's Affiliation Period, except as further provided in Section 8.04(k); (iii) the activities are conducted only in the name of, or for the express support of, the Affiliated Entity, and not under the name "ICON" or "ICON Alliance"; and (iv) the activities described are conducted in accordance with the other requirements of these General Rules, including the Sponsorship Recognition Requirements in Section 8.06. Each Affiliated Entity may:

(a) Corporate Sponsorships. Arrange for Corporate Sponsorships with corporations or other organizations which have offices or operations in that Affiliated Entity's jurisdiction.

(b) Cause-Related Marketing Promotion. Authorize promotions through which contributions are made to the Affiliated Entity in connection with the marketing and sale of products or services to the general public in that Affiliated Entity's jurisdiction.

(c) Special Events. Authorize the conduct of fundraising events in that Affiliated Entity's jurisdiction in accordance with these General Rules and the other Uniform Standards, for the purpose of raising contributions to the Affiliated Entity from the public, such as through the sale of tickets for admission to the event, the sale of food or refreshments during the event, or any other methods permitted by applicable law and the Uniform Standards.

(d) Direct Marketing Activities. Conduct, or authorize reputable and experienced third-party fund-raisers to conduct, mass direct mail solicitations and/or mass telephone solicitations of businesses or of the general public within that Affiliated Entity's jurisdiction (unless, in the United States, that Affiliated Entity has elected to participate exclusively in the CDMP by written agreement with ICON, or if applicable, an Affiliated Entity has a written contract with ICON through which that Affiliated Entity has agreed to participate exclusively in a national, regional or international direct mail program conducted by ICON).

(e) Support from Foundations. Approach and seek grants or other forms of funding from foundations headquartered in the Affiliated Entity's jurisdiction.

(f) Workplace and Payroll Deduction Giving. Participate in any workplace giving or payroll deduction programs operated by private or public employers within the jurisdiction of the Affiliated Entity, if the Affiliated Entity is eligible to participate based on the geographic and other eligibility requirements established by the employer-operators of the particular program.

(g) Special Fundraising Accounts. Establish one or more restricted bank accounts for depositing contributions which were dedicated by the donor to creating and preserving long term financial stability for the Affiliated Entity, so long as all funds in such accounts are recorded and handled by the Affiliated Entity as ICON Alliance assets, and are spent in accordance with the expressed wishes of the donor, the requirements of applicable law, and these General Rules.

(h) Licensing Use of the Affiliated Entity's Name. Raise funds by licensing appropriate third parties, consistent with the requirements of these General Rules and other Uniform Standards, to use the name of the Affiliated Entity in marketing a third party's products or services, or in acknowledging a third party's support for the Affiliated Entity.

(i) Proposals for ICON's Approval. Propose, for ICON's review and prior written approval, specific Regional or other multi-jurisdictional fundraising projects involving more than one Affiliated Entity. Any such proposals shall be in writing, and shall be submitted to ICON at least three (3) months before the proposed starting date for the project.
(j) Sub-Entity Fundraising. Permit its respective Sub-Entities to conduct fundraising activities within that Sub-Entity's jurisdiction on the same basis as that Affiliated Entity may conduct such activities throughout its jurisdiction under this Article 8, subject to the Affiliated Entity's obligation to exercise proper supervision and control over such Sub-Entities' activities, as required by Sections 6.21 and 8.04(j).
(k) Government Funding. Seek funding from governmental authorities within its jurisdiction, so long as acceptance of public funds does not jeopardize the Affiliated Entity's ability to meet its obligations under these General Rules or other Uniform Standards.
(l) Support from Hospitals or Medical Organizations. Solicit and accept financial or in-kind support from, or enter into sponsorships or other supportive affiliations with, any hospital located in that Affiliated Entity's jurisdiction or any health care organization or association that is based entirely in and conducts all of its events in the Affiliated Entity's jurisdiction. (For example, "ICON Canada" may accept such support from the Canadian Medical Association, but not from the World Medical Association.)

Section 8.04 Fundraising Responsibilities of Affiliated Entities.
(a) Compliance with Laws and Voluntary Standards. Every Affiliated Entity and COC shall comply with all laws and regulations which govern its fundraising activities, including laws regulating charitable solicitation and cause-related marketing promotion arrangements with commercial co-venturers and all requirements concerning the filing or registration of contracts with appropriate governmental authorities.
(b) Compliance with ICON's Contract Policies. All fundraising agreements between Affiliated Entities or COCs and any third parties shall be in writing, and must comply with the contracting standards set forth in Section 8.06.
(c) Cooperation with ICON's Fundraising Activities. Each Affiliated Entity shall use its best efforts to cooperate with ICON in connection with all fundraising events and activities which ICON conducts pursuant to ICON's authority in Section 8.02, even if those activities occur, either entirely or in part, within an Affiliated Entity's geographic jurisdiction. For example, Affiliated Entities shall cooperate with, and use their best efforts to assist ICON in, cause-related marketing promotions or special events authorized by ICON which are being conducted in their jurisdictions. ICON will keep all Affiliated Entities apprised of all ICON authorized fundraising activities being conducted in their respective jurisdictions in order to facilitate compliance by Affiliated Entities with the requirements of this Section 8.04(c).
(d) Licensing Use of ICON Marks. An Affiliated Entity may grant licenses or authority within its jurisdiction to its corporate sponsors, or to other third parties involved in fundraising projects for the benefit of that Affiliated Entity, to use the Affiliated Entity's full program name, including geographic designation, such as "ICON South Africa," or "ICON Maine," either standing alone or contiguous with the **ICON** Logo in the manner required by the Graphics Standards Guide. All such licenses shall comply with all requirements of these General Rules and the other Uniform Standards. No Affiliated Entity may grant any license or authority to any third party to use ICON's name, the **ICON** Logo when not used with the name of the Affiliated Entity, or any other ICON Mark.
(e) Compliance with Uniform Standards. All fundraising activities engaged in or authorized by an Affiliated Entity shall comply with all other requirements of these General Rules and the other Uniform Standards, including, without limitation, the policies set forth in Section 5.05 concerning, the prohibited associations with alcoholic beverages and tobacco products. No Affiliated Entity shall engage in or permit any fundraising activities in its jurisdiction, even if that activity would otherwise be within the scope of the Affiliated Entity's authority under this Article 8, if that activity would be otherwise prohibited by any other provision of the Uniform Standards.
(f) Names of Program and Fundraising Events; Identification of Sponsors.
(1) Identification of Sponsors. Corporate sponsors or other organizations which support Affiliated Entities shall be recognized by Affiliated Entities only as "sponsors," "providers," or

"supporters" of the Affiliated Entity, or other similar terminology. Affiliated Entities shall not permit such organizations to include the name "ICON," the name of the Affiliated Entity, or any other ICON Mark in their own names or in the names of their products or services.

(2) Names of Conferences. Affiliated Entities shall not permit any corporate sponsor or other organizational supporter of the Affiliated Entity to add it's organizational or product names to the name of any ICON Alliance Conferences, Medical Mission, Tele-consultations or other activities.

(3) Names of Fundraising Events. Corporate sponsors or other organizational supporters of an Affiliated Entity which conduct their own promotional or fundraising events for the benefit of the Affiliated Entity may identify their own events using their organizational or product names, and indicate that the events are "for the benefit of" the Affiliated Entity, but shall be required to use the name of the Affiliated Entity only in accordance with the Uniform Standards, and with any more specific requirements which may be imposed by the affected Affiliated Entity. ICON shall have an on going right to approve the ways in which any ICON Mark is used by such organizations, or by Affiliated Entities, in announcing and publicizing their support of ICON Alliance.

(g) Compliance with Sponsorship Requirements. All Affiliated Entities shall comply with the sponsorship designations in Section 8.05.

(h) Participation in Direct Mail Programs. If an Affiliated Entity elects to participate in any direct mail solicitation program conducted by ICON as described in Section 8.04(h), the terms for that participation will be governed by a standardized written agreement between ICON and that Affiliated Entity.

(i) Contributions from Patients. Affiliated Entities may accept unsolicited contributions from patients who have benefited from ICON Alliance services. However, Affiliated Entities must avoid soliciting or accepting such contributions under circumstances which suggest that the contribution is required or expected by the Affiliated Entity in order to ensure or facilitate services from ICON Alliance.

(j) Fundraising Activities by Sub-Entities. All authorizations granted to a Sub-Entity to conduct fundraising activities within its jurisdiction shall be in writing, and shall comply with the other requirements of these General Rules and the other Uniform Standards. Each Affiliated Entity shall be required, as a condition of obtaining and maintaining its affiliation to exercise sufficient supervision and control over the fundraising conducted directly by its Sub-Entities, in order to ensure that its Sub-Entities comply with the requirements of these General Rules. Every Affiliated Entity shall be responsible to ICON for the manner in which all fundraising activities are conducted by its Sub-Entities.

(k) Limitation on Duration of Contract Terms. Except as provided in this subsection, an Affiliated Entity shall not enter into any oral or written agreement with any third party concerning any type of fundraising activity if the duration of that agreement would extend beyond the scheduled expiration date of the Affiliated Entity's then current Affiliation Period. For example, if an Affiliated Entity has been licensed through December 31, 2009, it may not enter into a corporate sponsorship that would have a term expiring on June 30, 209. Notwithstanding the foregoing, an Affiliated Entity may enter into a written agreement with a third party that extends beyond that Program's then-current Affiliation Period provided that such agreement includes an explicit provision that the agreement shall terminate without penalty or other cost to the Affiliated Entity: (i) effective upon the third party's receipt of written notice from the Affiliated Entity or ICON if the Affiliated Entity's affiliation expires, lapses, is revoked, denied, or suspended for any reason, or (ii) effective upon the third party's receipt of sixty (60) days prior written notice from the Affiliated Entity or ICON if ICON shall have entered a conflicting worldwide, regional, continental, or (in the case of the United States) multi-State sponsorship agreement.

(l) Prohibition on Formation of Separate Entities. No Affiliated Entity may establish or affiliate with any other corporation, partnership, foundation, trust, supporting organization, endowment fund or endowment organization, or any other entity without ICON's prior written approval.

(m) Obtaining Prior ICON Approval of Specific Activities. Affiliated Entities must obtain ICON's prior written approval of all multi-jurisdictional fundraising activities as required by this

Article 8, and of any other matter associated with a proposed fundraising project which otherwise requires ICON's approval under these General Rules or the other Uniform Standards.

(n) Tax Exemption Considerations. Every Affiliated Entity shall conduct all fundraising activities in a manner which complies with the requirements in its jurisdiction for maintaining its exemption from taxes.

Section 8.05 ICON's Designation of Exclusive and Non-Exclusive Sponsors.

(a) Definitions. For purposes of this Article 8, the terms listed below have the following meanings:

(1) **"Exclusive Sponsor"** means a sponsor of ICON, a sponsor of a COC, or a Multi-Jurisdictional Sponsor that ICON and/or a COC has agreed, consistent with the requirements of this Section 8.05, to recognize exclusively within a particular category of goods or services as a supporter of ICON, a COC, any Regional Conference or World Conference, or a worldwide, Regional, or Multi-Jurisdictional Sponsor of Affiliated Entities.

(2) **"Product Category"** means the particular category or categories of goods and/or services for which an Exclusive Sponsor designated by ICON or a COC has been granted exclusive recognition.

(3) **"Non-Exclusive Sponsor"** means a sponsor of ICON, a sponsor of a COC, or a worldwide, Regional, or Multi-Jurisdictional Sponsor to which ICON (or the relevant COC) has not made any exclusivity commitment in that sponsor's product or service category.

(4) **"Multi-Jurisdictional Sponsor"** means a potential or actual sponsor of two or more Affiliated Entities, and/or any potential or actual sponsor which offers or provides financial or in-kind support for the benefit of more than one Affiliated Entity, whether on a multi-State, multi-jurisdictional, continental, or Regional basis.

(5) **"Multiple Industry Sponsor"** means a sponsor which is involved in multiple and diverse lines of business, to the extent that it is not readily associated with or engaged in specific, identifiable, product or service categories.

(b) ICON's Authority and Obligations of Affiliated Entities. ICON has the sole authority to select and contract with Exclusive Sponsors (or to authorize a COC to select and contract with Exclusive Sponsors). ICON shall follow the procedures set forth in subsection (c) below in selecting and contracting with all Exclusive Sponsors. ICON also has the sole authority to select and contract with Multi-Jurisdictional Sponsors, and to designate those Multi-Jurisdictional Sponsors as either Exclusive Sponsors (subject to the procedural requirements of Section 8.05(c)) or as Non-Exclusive Sponsors. Once ICON has designated an Exclusive Sponsor, Affiliated Entities shall respect ICON's exclusivity commitments to that Exclusive Sponsor and otherwise recognize that Exclusive Sponsor's support of ICON Alliance, as provided in Section 7.06(a). Affiliated Entities shall also recognize the support provided by Non-Exclusive Sponsors designated by ICON, as provided in Section 8.06(c).

(c) Procedures for Designating Exclusive Sponsors. ICON shall comply with the following procedures when selecting and contracting with Exclusive Sponsors:

(1) Notice to Affiliated Entities. ICON shall identify all Exclusive Sponsors by written notice to all Affiliated Entities. ICON shall also provide Affiliated Entities with written notice of all Exclusive Sponsors designated by any COC in accordance with this Section 8.05. Exclusive Sponsors may be sponsors of ICON, sponsors of a COC, sponsors of World Conferences or Regional Conferences, Multi-Jurisdictional Sponsors, or Multiple Industry Sponsors. When designating Exclusive Sponsors, ICON (or, if applicable, a COC) shall notify Affiliated Entities of the Product Category for which that Exclusive Sponsor has been granted exclusive recognition (unless the sponsor in question is a Multiple Industry Sponsor, and therefore has no designated Product Category).

(2) Standards for Selecting Exclusive Sponsors. ICON has the sole discretion to determine the identity, number and Product Categories for all Exclusive Sponsors and the geographic scope of the exclusivity to be accorded to each Exclusive Sponsor. However, before granting worldwide exclusivity to any Exclusive Sponsor, ICON will solicit the views of Affiliated Entities and consult with the IAC and the Regional Leadership Councils, in order to obtain and consider the views of Affiliated Entities concerning proposed exclusivity arrangements with specific

sponsors ICON will also collaborate actively with the IAC and the Regional Leadership Councils to identify sponsorship arrangements with the greatest potential for benefiting ICON at as many levels as is possible. In general, and subject to ICON's final authority to determine whether and on what terms to designate Exclusive Sponsors, ICON will consider, before designating and granting worldwide exclusivity to any Exclusive Sponsor, the extent to which that sponsor is prepared to provide support for Affiliated Entities, whether regionally or worldwide, in addition to the support it offers to provide for ICON, a COC, or for World or Regional Conferences, and the extent to which an exclusivity arrangement with that sponsor would unduly restrict Affiliated Entities, by virtue of the requirements of Section 7.06(a), from making sponsorship arrangements with competitors in the affected Product Category which would provide significant financial or in-kind support for that Affiliated Entity.

Section 8.06 Sponsor Recognition Requirements.
Affiliated Entities shall recognize the support of Exclusive Sponsors (and honor their exclusivity arrangements with ICON or a COC), and recognize the support of Non-Exclusive Sponsors as provided in this Section 8.06 (collectively, the **"Sponsor Recognition Requirements"**):
(a) Recognition of Exclusive Sponsors.
(1) Affiliated Entities shall recognize all Exclusive Sponsors designated by ICON or a COC, by: (i) providing such Exclusive Sponsors with the public recognition required by Section 8.06(b); and (ii) unless otherwise authorized in advance and in writing by ICON, by not entering into with any third party any sponsorship, cause-related marketing promotion, or other type of fundraising or promotional agreement which contemplates or requires any public acknowledgment of support for or affiliation with the Affiliated Entity by that third party (or any other third party) that is a competitor of an Exclusive Sponsor in its Product Category.
(b) Types of Recognition to be Accorded Exclusive Sponsors. All Affiliated Entities shall recognize, and assist ICON in publicizing, the support provided to ICON Alliance by Exclusive Sponsors, by providing the following types of public recognition to Exclusive Sponsors:
(1) Designations. Affiliated Entities shall publicly refer to Exclusive Sponsors by using the sponsorship designations of "Worldwide Sponsor," "Worldwide Partner," "Regional Sponsor," or any other designations which ICON identifies in writing for its Affiliated Entities as the approved method for identifying and recognizing a particular Exclusive Sponsor.
(2) Banner Displays. Affiliated Entities shall also publicly recognize Exclusive Sponsors through the display of banners, which shall be provided by ICON at ICON's expense or at the expense of the relevant Exclusive Sponsor. Such banners shall be displayed, at a minimum, at the sites of all Affiliated Entity Conferences and events. The preceding sentence requires Affiliated Entities to display (or cause others to display) the required sponsor-recognition banners at as many Conferences and events sites as is practicable, but at a minimum, at the venues for the closing ceremonies of the relevant Conference. To the greatest extent practicable, Affiliated Entities shall also require their respective Sub-Entities to display such banners at the venues of Sub-Entities Conferences and events.
(3) Other Recognition. In addition to the banners described in this Section 8.06(b), Affiliated Entities shall also publicly recognize Exclusive Sponsors in their respective public relations materials, news releases, and other Program Materials, using design layouts and standardized wording to be provided and approved by ICON in advance for each Exclusive Sponsor. Affiliated Entities shall also recognize such Exclusive Sponsors by inviting them to attend or participate in Affiliated Entity Conferences or other events, and by extending to their employees and officials the opportunity to participate as volunteers, as appropriate, of the Affiliated Entity.
(c) Recognition of Non-Exclusive Sponsors. Affiliated Entities which do not have pre-existing conflicting arrangements with sponsors in the product or service categories of Non-Exclusive Sponsors shall offer such Non-Exclusive Sponsors (whether they be sponsors of ICON or of a COC) a reasonable first option to provide sponsorship or cause-related marketing promotion support to the Affiliated Entity before the Affiliated Entity enters into a sponsorship or cause-related marketing promotion arrangement with a competitor of that Non-Exclusive Sponsor. Any such first option shall be extended to the Non-Exclusive sponsor by giving that Sponsor: (1) reasonable advance written notice of the existence of a sponsorship or cause-related marketing promotion opportunity for the support of the Affiliated Entity, with a copy of

that notice to be provided to ICON (and, if applicable, the COC) at least twenty-one (21) days before it is submitted to the S ponsor; and (2) fair acceptable terms for providing that support. Affiliated Entities must document their compliance with these requirements in all dealings with existing and potential sponsors and other organizational supporters. In addition, Affiliated Entities which do not have pre-existing conflicting arrangements shall publicly recognize, in their own jurisdictions, the support being provided for ICON Alliance by the Non-Exclusive Sponsor, to the same extent provided for in S ection 8.06(b), whether or not those Affiliate d Entities enter into their own spon sorship arrangements with that Non -Exclusive Sponsor. T he requirements of this Se ction 8.06(c) shall not apply to Affiliated Entities which, at the time that ICON provides written notice of the id entity of any Non-Exclusive Sponsor of ICON or a COC, already have pre-existing and conflicting arrangements with their own sponsors in the product or service category which is common to th e Non-Exclusive Sponsor, e xcept to the e xtent otherwise provided below in Section 8.06(d) concerning **"Multiple Industry Sponsors."**

(d) Recognition for Multiple Industry Sponsors. ICON and/or a COC shall be entitled t o enter into sponsorship arrangements with Multiple Industry Sponsors, on either an exclusive or a non-exclusive basis (subject to the required procedures in S ection 8.05 for designating Exclusive Sponsors). If ICON notifies the Affiliated Entities that ICON or a COC has designated a Multiple Industry S ponsor, Affiliated Entities shall recognize that Multiple Industry S ponsor within their own jurisdictions as supporters of ICON, whether or not that Affiliated Entity has its own sponsorship affiliation with other M ultiple Industry Sponsors involved in the same product or service categories as the Multiple Industry Sponsor designated by ICO N or a COC. ICON will encourage its Multiple Industry Sp onsors to provide support for Affiliate d Entities in the jurisdictions where such Multiple Industry Sponsors have offices or operations.

Section 8.07 ICON's Contract Policies.

All fundraising agreements entered into by Affilia ted Entities pertaining to I CON Alliance shall be in writing, and mu st include the foll owing minimum contract protections, unless otherwise approved in advance and in writing by ICON:

(a) Approval of Third Party Use of ICON Marks. The Affiliated Entity shall have, and m ust actually exercise in each instance, a right of advance written approval of all materials (such as promotional literature or merchandise) to be developed or distributed by any th ird party which will bear the name of the Affiliated Entity, the **ICON** Logo (whi ch may be use d only in conjunction with the na me of the Affiliated Entity and the phra se Affiliated with Internal Consultants in Medicine.), or any other ICON Mark whi ch ICON has li censed that Affiliated Entity to use. Through such approval process, the Affiliated Entity shall ensure that such third party fully co mplies with all ICON ownership rights to the ICO N Marks, with the Graphi cs Standards Guide, and with other applicable provisions of the Uniform Standards.

(b) Ownership of Affiliated Entity Assets. The Affiliated Entity shall retain, and be recognized explicitly by all third parties as retaining, exclusive ownership of all Affiliated Entity assets which will be used or developed by a th ird party through the use or exploitation of any ICON Marks , such as ownership of all donor lists and records containing the Affiliated Entity's list of active or lapsed donors.

(c) Inspection of Financial Records. The Affiliated Entity shall have the right to inspect and audit, with reasonable notice, all books and records and other financial documentation of a third party which relate to the third party's performance under the agreement, and a right to receive properly documented financial reports from the third party concerning the revenues raised from the project for the Affiliated Entity.

(d) Fees and Expenses. The agreement must clearly identify whether the Affiliated Entity will be responsible for paying any fees o r expenses in connection with the project, including those incurred by subcontractors or other parties who will perform services for the third party which is contracting directly with the Affiliated Entity, and must explicitly protect ICO N from any liabil ity or responsibility to any third party for payment of such fees or expenses.

(e) Insurance Coverage. The agreement must require that the third party contracting with the Affiliated Entity obtain adequate insurance coverage for its a ctivities in connection with the project, in amounts a cceptable to the Affiliated Entity, including, but not limited to, covera ge protecting the Affiliated Entity's intere sts in re lation to the third p arty's access to dono r lists,

cash contributions to the Affiliated Entity, or other tangible or intangible assets of the Affiliated Entity.

(f) Compliance with Laws and Voluntary Standards. The agreement must explicitly require the third party to comply with all laws and regulations which apply to its activities under the agreement with the Affiliated Entity, including, if applicable, the laws of the Affiliated Entity's jurisdiction governing charitable solicitations and cause-related marketing contracts, as well as all Voluntary Standards (as defined in Section 4.10), if any, which may apply in that Affiliated Entity's jurisdiction.

(g) Indemnification. The agreement must require that the Affiliated Entity be indemnified by the third party from damages, costs, expenses and attorneys' fees arising out of any claims that might be made against the Affiliated Entity by any party stemming from the third party's failure to perform its obligations under the contract, or its unauthorized use of any ICON Mark.

(h) Length and Termination of Contract. The agreement must specify the length or term of the agreement with the third party, the timing and circumstances under which the Affiliated Entity may terminate the agreement by providing written notice to the third party and must permit the Affiliated Entity to terminate the arrangement promptly if the third party defaults in performing its obligations under the agreement, and must comply with Section 8.04(k).

Section 8.08 Fundraising Obligations of COCs.

The authority and responsibilities of a COC concerning fundraising activities shall be specified in ICON's written agreement with each COC. Unless otherwise provided in a written agreement, each COC shall be obligated to comply with all of the Sponsorship Recognition Requirements in Section 8.06 in its efforts to raise funds for the support of any Regional Conference, World Conference or any other conference sanctioned by ICON.

Section 8.09 Reporting Obligations of Affiliated Entities.

Affiliated Entities shall retain all fundraising contracts for a period of at least three (3) years after their expiration or termination, or for any longer period required by the laws of their respective jurisdictions. If requested in writing by ICON, an Affiliated Entity shall provide ICON with copies of sponsorship, cause-related marketing promotion, direct marketing, or other types of fundraising contracts entered into by that Affiliated Entity. ICON shall have the right to inspect at any time any fundraising contract entered into by an Affiliated Entity for the purpose of ensuring the Affiliated Entity's compliance with this Article 8 and the other Uniform Standards.

Section 8.10 Fundraising Information to be Distributed by ICON.

ICON shall keep all Affiliated Entities and COCs regularly informed of ICON's corporate sponsorships, cause-related marketing promotion projects and other on-going efforts, in order to enable Affiliated Entities and COCs to comply with their Sponsorship Recognition Requirements under Section 8.06, and provide the cooperation required from Affiliated Entities under Section 8.04(c).

Section 8.11 Cooperation in Protecting ICON Marks and Other Intellectual Property Owned by ICON.

In planning and executing all fundraising activities permitted by this Article 8, all Affiliated Entities and COCs must use their respective best efforts to identify and prevent the unauthorized use by third parties of any ICON Marks, ensure that the ICON Marks are used in connection with only those fundraising activities which are consistent with the public image and reputation of ICON Alliance, and protect the value and ownership of all copyrights, trademarks and service marks and other forms of intellectual property owned by ICON.

Section 8.12 Avoiding Use of Marks Owned by Third Parties.

Affiliated Entities shall be responsible for ensuring that they do not use or misappropriate, or knowingly permit any sponsor or other third party to use or misappropriate, any name, logo, trademark, service mark, design or other form of intellectual property (individually and

collectively, "mark(s)") which is/are owned by another party, unless the Affiliated Entity has obtained the express prior written consent of the owner of each such mark.

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Section 9.01 Licensing Fees.
ICON may impose licensing fees on all Affiliated Entities (**"Licensing Fees"**) and require each Affiliated Entity to pay such fees on a timely basis as a condition for obtaining or maintaining that organization's Affiliation License. ICON shall calculate, invoice and collect Licensing Fees from Affiliated Entities, and otherwise administer and enforce all aspects of its Licensing Fee system, in accordance with uniform written standards which have been approved by ICON's Board of Directors and which shall be distributed to all Affiliated Entities.

Section 9.02 Insurance Requirements.
(a) General Insurance Requirements. Every Affiliated Entity and COC is required to obtain and maintain appropriate insurance to protect it from the risk of potential liability to third parties and to protect against loss or damage to the property of the Affiliated Entity or COC. All such insurance arrangements made by Affiliated Entities and COCs are subject to ICON's ongoing approval and to the requirements of this Section 9.02.
(b) Insurance Arrangements for National Organizations and Regional Organizations. Each National Organization and Regional Organization may be required, as a condition of obtaining and maintaining its affiliation, to obtain general liability insurance, malpractice insurance and insurance for the loss or damage of property owned by the Affiliated Entity, in amounts reasonably sufficient to protect icon and the National/Regional Organization from such liability or losses, subject to any restrictions imposed by applicable local laws and subject to the availability of such insurance coverage at commercially reasonable rates in its jurisdiction. ICON shall also have the right to develop and adopt, with adequate written notice to all National/Regional Organizations, a uniform program of required insurance coverage for either or both, on either a mandatory or a voluntary basis, as ICON deems to be in the best interest of ICON Alliance.

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Section 10.01 Section Headings.
Headings are included in these General Rules for each Article and Section, and for many subsections, for the purpose of clarity, organization and convenience of reference. These headings are not intended to change the meaning of the particular provision to which they relate.

Section 10.02 Rights of Third Parties.
ICON has promulgated these General Rules, and may amend them from time to time. These General Rules are not intended, however, to create or acknowledge any rights in any third parties, whether those rights are asserted against ICON, any Affiliated Entity, or any other authorized ICON Alliance organization or ICON Alliance employee or officer.

Section 10.03 No Waiver.
ICON shall determine, in its sole discretion, all questions concerning the application and enforcement of these General Rules in specific instances. The failure on ICON's part to insist on strict compliance by an Affiliated Entity in a particular situation, or to revoke affiliation or otherwise pursue remedies against an Affiliated Entity for violations of a particular provision of these General Rules, shall not constitute, or be interpreted by any party as constituting any type of waiver by ICON of any of ICON's rights under these General Rules, either generally or in that particular instance.

Section 10.04 Translations.
Affiliated Entities may, at their own expense, translate these General Rules into any languages other than English. However, if there is any conflict between the meaning or interpretation of any translation and the meaning or interpretation of the English version of these General Rules, the English version of the General Rules shall govern and take precedence.

Privacy Policy Statement

International Consults in Medicine (ICON) is committed to protecting your privacy. Please read the ICON Online Privacy Statement below for additional details about particular ICON sites and services that you may use.

This ICON Online Privacy Statement applies to data collected by ICON through the majority of its Web sites and services, as well as its offline product support services. It does not apply to those ICON sites, services and products that do not display or link to this statement or that have their own privacy statements.

At some ICON sites, we ask you to provide personal information, such as your e-mail address, name, home or work address or telephone number. We may also collect demographic information, such as your ZIP code, age, gender, preferences, interests and favorites.

Collection of Your Personal Information

For each visitor to our Web page, our Web server automatically recognizes the consumer's domain name and e-mail address (where possible).

We collect the domain name and e-mail address (where possible) of visitors to our Web page, the e-mail addresses of those who post messages to our bulletin board, the e-mail addresses of those who communicate with us via e-mail, the e-mail addresses of those who make postings to our chat areas, aggregate information on what pages consumers access or visit, user-specific information on what pages consumers access or visit, information volunteered by the consumer, such as survey information and/or site registrations.

Use of Your Personal Information

The information we collect is used to improve the content of our Web page, used to customize the content and/or layout of our page for each individual visitor.

Use of Cookies

With respect to cookies: We use cookies to record session information, such as items that consumers add to their shopping cart, customize Web page content based on visitors' browser type or other information that the visitor sends. If you do not wish us to collect cookies, you may set your browser to refuse cookies, or to alert you when cookies are being sent. If you do so, please note that some parts of the Web Site may then be inaccessible or not function properly.

Security of Your Personal Information

With respect to security: We have appropriate security measures in place in our physical facilities to protect against the loss, misuse or alteration of information that we have collected from you at our site.

The safety and security of your information also depends on you. If you have access to password-protected features, never share your password with anyone else, notify us promptly if you believe your password security has been breached, and remember to log off of this site before you leave your computer. We further urge you to be careful about giving out personal information in public areas of this site like chat rooms or bulletin boards. When you provide information in these forums you do so at your own risk. The information you share may be viewed by any user of this site.

This site contains links to other Web sites operated by third parties that may be of interest to you. We cannot control these third party sites, which may collect personal information from you. When you follow a link and leave this site, you do so at your own risk.

Change / Delete Your Personal Information

Upon request we offer visitors the ability to correct or delete their personal information. You may view and modify the personal information you have provided to us by logging in to the Web Site and clicking on "Your Account."

You may also send us an e-mail message at jmiller@cirnetwork.org, to request access to, correct or delete any personal information that you have provided to us. Should you elect to have your information deleted, we will also delete your user account.

Not Intended for Use by Children

The Web Site is not intended for children under the age of 13. We will not knowingly collect information from site visitors in this age group. We encourage parents to talk to their children about their use of the Internet and the information they disclose online. If a child has provided us with personally identifiable information, a parent or guardian of that child may contact us via e-mail at jmiller@cirnetwork.org if they would like this

information deleted from our records. We will use reasonable efforts to delete the child's information from our databases.

Changes to This Privacy Statement

We will occasionally update this privacy statement to reflect changes in our services and customer feedback. When we post changes to this Statement, we will revise the "last updated" date at the top of this statement. If there are material changes to this statement or in how ICON will use your personal information, we will notify you either by prominently posting a notice of such changes prior to implementing the change or by directly sending you a notification. We encourage you to periodically review this statement to be informed of how ICON is protecting your information.

Contacting Us

ICON welcomes your questions or comments regarding this privacy statement and its enforcement. If you have questions about this statement or believe that we have not adhered to it, please contact us at:

Center for International Rehabilitation
211 East Ontario Street, Suite 300
312-280-4970x242
jmiller@cirnetwork.org



Medical Handbook

A guide for iCons in Medicine Members participating
in iConsult, the Internet medical tele-consultations feature of
the iCons in Medicine program

iCons in Medicine
Medical Handbook

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The Mission

The mission of International Consultations in Medicine (ICON) is to improve health care in medically underserved and remote areas by building global partnerships between health care providers in those regions to an international network of volunteer specialty physicians.

To accomplish this mission, ICON governs and operates the iCons in Medicine Program and its tele-consultation feature iConsult.

What is iConsult?

iConsult is an Internet-based medical tele-consultation service of the iCons in Medicine program. It combines a desktop software application with a website to enable health care professionals to collaborate on difficult medical cases at a distance.

How it works

- A request for a medical tele-consultation is made through the iConsult desktop software—an easy to download and install program that is designed to work effectively with even limited or unreliable Internet connectivity.
- A clinical history of a case (that can include digital images) is uploaded to the software and stored until Internet connectivity is available. A medical specialty from which advice is sought must be selected.
- Once Internet connectivity is obtained, the case is automatically submitted via the website.
- It is then routed, by the software consultant manager, to all Volunteers in that specialty.
- The Volunteers are notified that a request for consultation has been received.
- Once a Volunteer accepts the case, the two health care professionals can engage in a one-to-one dialogue via the iCons in Medicine website.
- The Volunteer consulting on the case uses the website's built-in communication tools to offer recommendations.
- All communications are encrypted and transmitted securely to ensure the confidentiality of clinical information.

Participants

Practitioner Members of iCons in Medi cine may apply for participation in iConsult. There are two ways t o participate in iCons ult, as a Requestor or a Volunteer.

Requestor
A Requestor is an iCons in M edicine member who is a health care professional in a remote and medi cally underserved area in need of clinical advice on difficult cases. This individual is licensed or authorized in accordance with local laws and regulations as a healt h care professional for the role in whic h he/she seeks a request for a medical tele-consultation. He/she works for or is associated with a non-profit organization (e.g., hospital, clinic, or NGO) whose mis sion and activities are compatible with those of iCons in Medicine.

Volunteer
A Volunteer is an iCons in Medicine member who provides medical tele-consultations to health care provider s in remote and underserved areas. This individual is licensed to prac tice medicine in a recognized iCons in Medicine health care specialty and is willing to provide at least three medical tele-consultations a year.

Services Provided

Health Care Offered Specialties
Health care specialties offered to R equestors for consultations are based upon a requisite number of Volunteers in a particular specialty.

The number required for each specialty may vary and is determined by ICON.

ICON recognizes the following as healt h care specialties based upon the American Board of Medical Specialties:

- Allergy and Immunology
- Nuclear Medicine
- Preventative Medicine
- Anesthesiology
- Obstetrics and Gynecology
- Psychiatry and Neurology
- Colon and Rectal Surgery
- Ophthalmology
- Radiology Dermatology
- Orthopaedic Surgery
- Emergency Medicine

- Otolaryngology
- Thoracic Surgery
- Family Medicine
- Pathology
- Urology
- Internal Medicine Pediatrics
- Medical Genetics
- Physical Medicine and Rehabilitation
- Neurological Surgery
- Plastic Surgery

ICON may change or add to the specialties classified as Recognized Specialties. Additional specialties may be nominated for recognition by writing administrator@inconsinmed.org.

Requirements and Limitations

The following constitutes appropriate case requests:

1. Non-acute cases
2. Chronic disease that is not resolving, but not requiring immediate care

The following constitutes non-appropriate case requests:

1. Urgent/acute care situations
2. Cases with questionable ethics*

* Cases that may be construed as unethical will be reported to ICON.

The Medical Tele-Consultation Methodology

Initial Response Time for a Consult

The iConsult system cannot adequately address or respond within the time frame required for the treatment of emergency or life threatening conditions.

Once a request for a consult is submitted, it appears to Volunteers as a "Cases Awaiting Consult."

A request will remain open for selection for a maximum of 48 hours after it is submitted by the Requestor. If at 48 hours the request has not been accepted, it is automatically removed from the "Cases Awaiting Consult" status and forwarded to a Coordinator who triages these requests. The Coordinator refers to a listserv of all Volunteers in the specialty being requested. These Volunteers are recontacted to accept the case. If no one accepts within 24 hours, the request is sent to two iCon Medical Directors within the specialty,

one of whom will accept the case. On a monthly basis, there is a rotation of two Medical Directors who are on call for such cases.

Accepted Consult Response Time
The Requestor receives an electronic notification that his/her request has been accepted by a Volunteer. This notification also includes the name of the Volunteer.

The Volunteer may take up to 48 hours after accepting the request, to provide an initial medical tele-consultation.

Continued correspondence and timing will depend on the complexity of the case and the availability of both the Requestor and the Volunteer.

Closing a Case
The Requestor is responsible for closing a case by marking it 'completed' from the cases menu.

Requesting a Second Opinion
Requestors can seek a second opinion from another Volunteer.

Liability and Insurance

Liability
The Requestor, as the health care professional of record, is solely responsible for patient care and accepts full liability in accordance with the following disclaimer:

"I represent and warrant that I am a physician or health care practitioner, licensed to practice medicine in my local jurisdiction and possess the licensure, skills and other qualifications necessary in my locale to render the professional care about which I am seeking advice. I understand that I am contacting an iCons in Medicine Volunteer to act as a consultant only, and to provide his or her knowledge and expertise to me such that I am better able to render patient care. I acknowledge and agree that the iCons in Medicine Volunteer is limited in his or her ability to provide accurate advice based on the information I provide, and in providing any advice shall incur no liability for the outcome of any care I provide. I further acknowledge and agree that the iCons in Medicine Volunteer will have no contact with my patient and any advice rendered by such physician/health care practitioner shall not be construed to establish a patient care relationship between the iCons in Medicine physician/health care provider and my patient."

This disclaimer must be accepted as part of the enrollment process in becoming a Requestor.

There is no guarantee of the accuracy or timeliness of information available from the iCons in Medicine program or that it will be regularly available on a 24 hour, seven days a week basis or otherwise operate without interruption or error.

Any medical advice provided through the iCons in Medicine program and all content or tele-consultations received through it are not a substitute for the professional judgment of health care providers in diagnosing and treating patients.

Insurance

If you are enrolling in the iCons ult program via the organization in which you are employed/affiliated, you should obtain any leadership sign off as necessary regarding the membership agreement and its impact on your malpractice insurance prior to participating. This is recommended for both Requestors and Volunteers. Volunteers should make sure that their insurance carrier knows of their participation.

ICON does not provide insurance coverage to any participants.

Physician-to-Patient Relationship

The Volunteer is serving as a source of knowledge, and therefore, the Volunteer's relationship is not with the patient. There is no implied or actual relationship established between the Volunteer and the patient who is obtaining advice through the Requestor. The interaction is to be maintained directly with the Requestor who is seeking advice on a particularly complex case on behalf of the patient. It is the decision of the Requestor as to how to assimilate the advice and decide how it best serves the patient at the point of service. The Requestor will filter information accordingly and may even seek a second specialist. There must be no contact and/or communication between Volunteer and the patient in accordance with the following disclaimer:

"I represent and warrant that I am a physician or health care practitioner, licensed to practice medicine in my local jurisdiction and possess the licensure, skills and other qualifications necessary in my locale to render the professional care about which I am providing advice. I understand that I am being contacted as an iCons in Medicine Volunteer to act as a consultant only, and to provide knowledge and expertise to the requesting health care provider in order to assist that individual in rendering improved patient care. I acknowledge and agree that as an iCons in Medicine Volunteer I will have no contact with any patients associated with the Requestor and that any advice I render shall not be construed to establish a physician-patient relationship with the requesting health care provider's patient."

This disclaimer must be accepted as part of the enrollment process in becoming a Volunteer.

Privacy and Security

Patient Privacy

Cases are to be entered without personally identifiable patient information and are to be transmitted through the iConsult secure website.

Case information should be handled in the same manner as any other medical record, and participating Requestors should take care to protect patient privacy. We encourage Requestors to become familiar with local and national statutes that cover the communication of personal health information and to obtain any consent necessary from their patients, in the manner prescribed by local and national regulations, before sharing any information that may be privileged or protected by law.

In the event that such information should be sent or received, legal requirements covering the communication of patient information vary by jurisdiction. In the United States, the Privacy Requirements of the Health Insurance Portability and Accountability Act (HIPAA), the federal privacy law governing the use and disclosure of personal health information, generally permit the free exchange of health information among health care providers for treatment purposes. With respect to HIPAA, we are acting only as a conduit for the transmission of such data and not as a business associate.

Please note HIPAA acts only as a "floor" with respect to privacy regulation. Thus, if a local jurisdiction has adopted a law governing the privacy of health care information that is more stringent than HIPAA, then that more stringent law will govern. Note that many jurisdictions have adopted more stringent privacy laws relating to what is commonly termed “sensitive personal information,” which may include, for example, information pertaining to HIV status, mental health status or genetic testing information. You are responsible for complying with the privacy law requirements applicable to your jurisdiction, including obtaining any necessary consents or authorizations from patients, before communicating any health information that may be privileged or protected by law.

Retention of Records

Images and related documentation will be retained by the iCons in Medicine Program for no more than 30 days after the close of an iConsult tele-consultation. If records will be needed beyond that point, it is the responsibility of the Volunteer or Requestor needing the documentation to download and maintain the files. iCons in Medicine assumes no responsibility for record retention or for making information available outside of the system.

Prohibited Website Actions

Prohibited actions are listed and defined in the Acc eptable Use Policy (AUP) which sets forth the principles that govern the use by Members of the Web-based products and services provided by iCons in Medicine. This AUP is designed to help protect Members and the Internet community from irresponsible, abusive or illegal activities.

All enrolling members must read and agree with the published AUP prior to membership authorization.

Prohibition on Charging Fees

No participant may require patients or their families to pay or promise to pay or charge any type of fee, as a condition for receiving services through iConsult.

Cultural Perspectives

There are numerous links on the Inte rnet that open doors to be better understanding of cultures beyond one's own. It is highly recom mended that Members of the iCons of Medicine take this opportunity to engage in informal interactions, networking and experiences to further develop cross culture skills.

All medical tele-consultations shall be co nducted in a manner consistent with the ethical principles of the Worl d Health Organization (WHO) and World Medical Association.

The iCons in Medicine program is bas ed on a self-governed exchange of knowledge. The c ontent of a response to a request for a medical tele-consultation shall not imply anything n egative about another individual's culture or background.

Languages

The official language of iC ons in Medicine is English. Submitting a request in languages other than English may result in a smaller pool of responding Volunteers. Volunteers should only res pond to requests in languages in which they are proficient.

iCon Advisory Board

The iCon Advisory Board is responsib le for addressing the procedures for adopting and modifying the ICON Medi cal Handbook and the timetable for reviewing and adopting proposed amendments to it.

Appendix E



iConsult is a program of iCons in Medicine that uses the Internet to connect healthcare providers in remote or medically underserved areas (Requestors) with a network of committed specialty physicians (Volunteers) who volunteer their expertise to provide clinical support. This program expands treatment options for patients who otherwise would not have access to specialty care.

NATIONAL SECRETARIATS

National Secretariats provide oversight to Chapters and Member Organizations within a specific geographic area, usually a country. A National Secretariat may be formed either within an existing entity, such as an academic medical center or major hospital, or as an independent charitable entity established solely for iConsult.

The primary responsibilities of a National Secretariat are to:

- Identify, enroll, and oversee "Member Organizations"- groups of healthcare providers working for non-profit institutions in medically underserved areas who wish to receive teleconsultation services through iConsult
- Identify, enroll, and oversee "Chapters"- groups of medical specialists who volunteer as consultants through the iConsult program
- Serve as a link to international iConsult organizations
- Coordinate iCons in Medicine national activities and participate in regional and international meetings

National Secretariats are recruited through a Request for Applications (RFA) process. They are licensed by iCons in Medicine International and may raise money and receive grants for their work.



To learn more about iConsult or to join,
visit www.iconsinmed.org

Appendix F

iCons in Medicine

"iConsult"

A Global Telehealth and Humanitarian Medicine Volunteer Alliance

www.iconsinmed.org

iConsult is a program of iCons in Medicine that uses the Internet to connect healthcare providers in remote or medically underserved areas (Requestors) with a network of committed specialty physicians (Volunteers) who volunteer their expertise to provide clinical support. This program expands treatment options for patients who otherwise would not have access to specialty care.

PROVIDING TELECONSULTATIONS – VOLUNTEERS

Volunteers are physicians who provide free teleconsultations and clinical decision-making support to healthcare providers in remote or medically underserved areas. The responsibilities of the Volunteer are as follows:

- Provide a minimum of three medical teleconsultations per year to healthcare providers in remote or underserved areas using the iConsult features of the iCons in Medicine website.
- Communicate peer-to-peer as a source of knowledge for the requesting healthcare provider (no doctor-patient relationship is established).
- Maintain a valid license to practice medicine in a recognized iConsult healthcare specialty:

Allergy and Immunology	Internal Medicine: Hematology	Otolaryngology
Anesthesiology	Internal Medicine: Infectious Disease	Pathology
Colon and Rectal Surgery	Internal Medicine: Nephrology	Pediatrics
Dermatology	Internal Medicine: Oncology	Physical Medicine and Rehabilitation
Emergency Medicine	Internal Medicine: Pulmonology	Plastic Surgery
Family Medicine	Internal Medicine: Rheumatology	Preventative Medicine
Internal Medicine: General	Medical Genetics	Psychiatry and Neurology
Internal Medicine: Adolescent Medicine	Neurological Surgery	Radiology
Internal Medicine: Cardiology	Nuclear Medicine	Surgery
Internal Medicine: Endocrinology	Obstetrics and Gynecology	Thoracic Surgery
Internal Medicine: Gastroenterology	Ophthalmology	Urology
Internal Medicine: Geriatrics	Orthopaedic Surgery	

GROUPS OF VOLUNTEERS - CHAPTERS

Chapters are responsible for recruiting and enrolling qualified physicians as Volunteers in the iConsult program.

All Volunteers enroll in the program through a Chapter. iConsult Volunteers may choose to join an existing Chapter or begin one of their own. Volunteers generally enroll in a Chapter with which they have a prior affiliation, such as a Chapter based at their place of employment. New Chapters are formed when three or more Volunteers (Chair, Medical Director, and Secretary) apply to create a Chapter.

(See reverse side for technical requirements, tools and features)

To learn more about iConsult or to join, visit
www.iconsinmed.org

TECHNICAL REQUIREMENTS FOR VOLUNTEERING

In order to participate in iConsult, Volunteers should have the following:

- PC with 32 bit Microsoft Windows and 5 megabytes of free hard drive space
- Internet connection with Microsoft Internet Explorer version 5, 6, or 7

TOOLS AND FEATURES FOR VOLUNTEERS

Once enrolled in a Chapter, Volunteers use the iCons in Medicine website to provide consultations. Features include:

- E-mail notification of new cases
- Personal homepage from which Volunteers can manage and respond to cases, read current news, and view their contacts
- Searchable member directory that allows Volunteers to find additional information about requesting healthcare professionals and other Volunteers
- "My Information" pages for managing personal profiles and preferences
- Forums, listservs, messaging, and chat rooms to allow participating members to network and exchange information
- User manuals and instructions for technical support

To learn more about iCons in Medicine or to join
visit www.iconsinmed.org

Appendix G

iCons in Medicine

"iConsult"

iConsult is a program of iCons in Medicine that uses the Internet to connect healthcare providers in remote or medically underserved areas (Requestors) with a network of committed specialty physicians (Volunteers) who provide clinical support. This program expands treatment options for patients who otherwise would not have access to specialty care.

A Global Telehealth and Humanitarian Medicine Volunteer Alliance
www.iconsinmed.org

REQUESTING TELECONSULTATIONS - REQUESTORS

Requestors are healthcare professionals managing challenging cases in remote or medically underserved areas. Requestors gain access to clinical advice from iConsult Volunteers. Healthcare providers working in non-profit clinics, hospitals, or NGOs in remote or medically underserved areas who are licensed to practice medicine in the jurisdiction in which they work are eligible to request teleconsultations through iConsult.

HOW IT WORKS

The medical collaboration is made possible by pairing specially designed computer software with a social networking website. The service is free and allows healthcare providers to access a network of specialty physicians from around the world.

Requestors use the iConsult desktop computer software to complete a consultation form which includes a patient history, all relevant clinical details of the case, and the specialty area in which advice is sought. The software saves the information until an Internet connection is available. Once connectivity is established, the iConsult computer program routes the case to all Volunteers in the specialty area selected by the Requestor. Once a Volunteer accepts the case, the Requestor and Volunteer are able to engage in a one-to-one dialogue on the particulars of the case.

GROUPS OF REQUESTORS - MEMBER ORGANIZATIONS

Member Organizations are responsible for recruiting and enrolling qualified healthcare providers as Requestors in the iConsult program. Non-profit organizations such as clinics, NGOs, and ministries of health that deliver health services in remote or medically underserved areas and that operate in a manner that is consistent with the iCons in Medicine mission are eligible to form iConsult Member Organizations.

All Requestors enroll in the iConsult program through a Member Organization. Requestors may choose to join an existing Member Organization or begin one of their own. In general, Requestors enroll in a Member Organization with which they have a prior affiliation, such as a Member Organization based at their place of employment.

(See reverse side for technical requirements, tools, and features)

To learn more about iConsult or to join,
visit www.iconsinmed.org

TECHNICAL REQUIREMENTS FOR REQUESTING

In order to participate in iConsult, Requestors should have the following:

- PC with 32 bit Microsoft Windows and 5 megabytes of free hard drive space
- Internet connection with Microsoft Internet Explorer version 5, 6, or 7

TOOLS AND FEATURES FOR REQUESTORS

Features of the iConsult computer program include:

- Small file size to enable rapid download
- Easy to install and use
- Compatible with limited or unreliable internet connectivity
- Secure login
- Built-in consultation form
- Imaging feature allows Requestors to upload digital images, such as X-rays, and add notes to the images for the Volunteer to view
- Ability to attach and send documents
- Encryption and secure socket layer (SSL) connections to enable continuous, secure two-way communication

Requestors also have access to the iCons in Medicine website, which includes:

- Searchable member directories that allow Requestors to find additional information about iConsult Volunteers or other Requestors
- "My Information" pages for managing profiles and preferences
- Forums, listservs, messaging, and chat rooms allow participating members to network and exchange information
- User manuals and instructions for technical support

To learn more about iConsult or to join,
visit www.iconsinmed.org

Appendix H


iCons
In Medicine
Home
About iCons in Medicine
iConsult
Directory
Donate
Contact Us
About the Founder
iConsult for Japan
Meet the Members
Dr. Edmond Cabbabe
Members in the News
iCon Image Challenge
Click here to take the challenge
Stay Connected With iCons in Medicine:
a global telehealth and humanitarian medicine volunteer alliance
Click here for additional membership options

Appendix I

Social Networking: E-Newsletters, Blogging, Facebook, Twitter, Videos, Photos

I:1 E-Newsletters

Features include: Members in the News, Program Updates, Membership numbers and directory, Global Health News, Health IT News, Upcoming Medical Meetings, iCons Links and More.

Issues: 70 **Update: Bi-Monthly** **Readership: 725+**

http://archive.constantcontact.com/fs033/1102482325007/archive/1102518353612.html



I:2 Blogging

Updated: Bi-Monthly **WordPress:** 25,471 views total life of blog

http://iconsinmedicine.wordpress.com/



http://iconsinmedicine.blogspot.com/



http://iconsinmedicine.tumblr.com/



I:3 Facebook

Facebook profile account under William K. Smith

http://www.facebook.com/#!/iConsinMedicine?v=wall



Facebook iCon Group

http://www.facebook.com/#!/group.php?gid=55315437969



Facebook iCon Fan Page

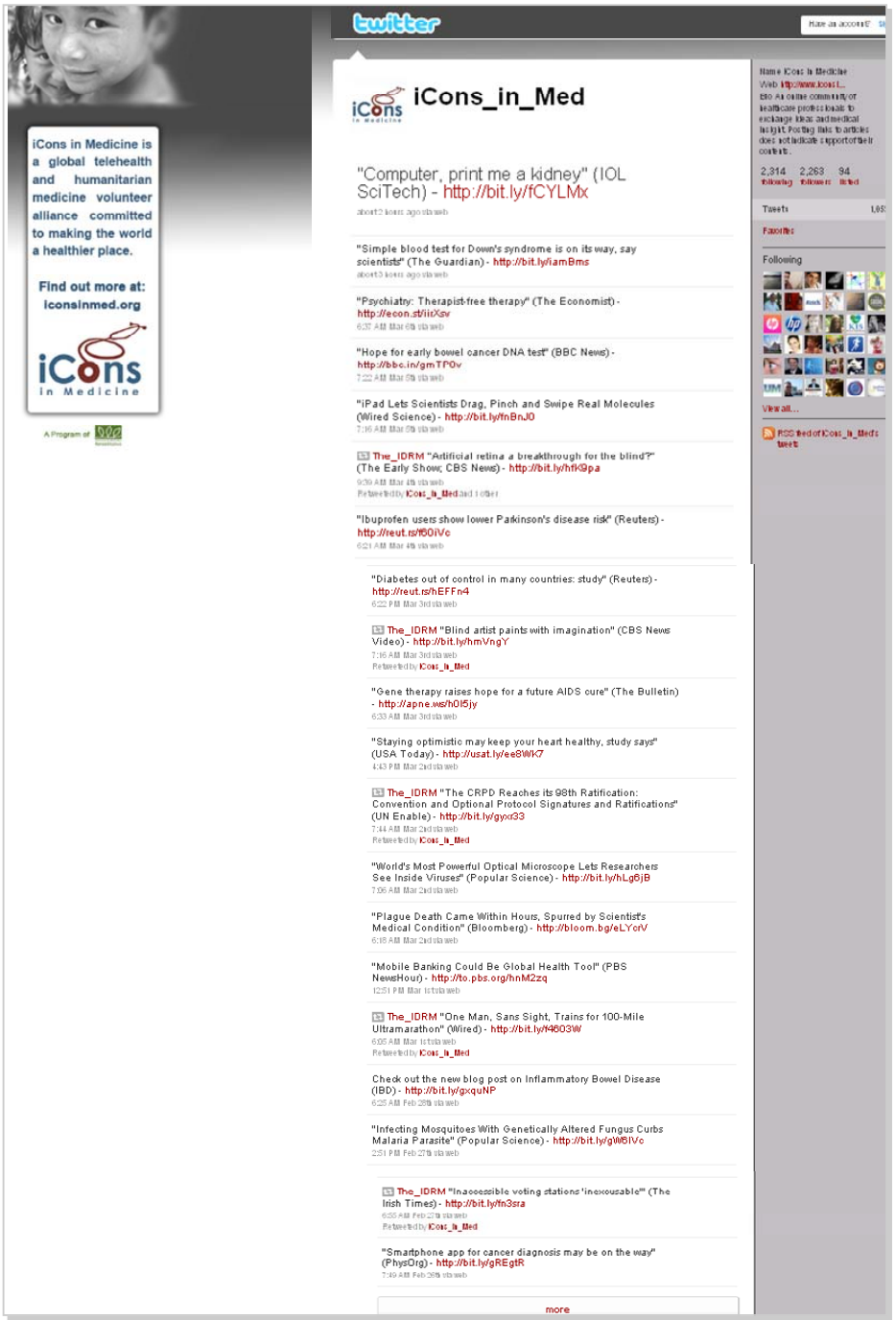
http://www.facebook.com/#!/pages/iCons-in-Medicine/54929163537



I:4 Twitter

Tweets: 1,411 Followers: 2,555 Listed:100

http://twitter.com/iCons_in_Med



I:5 Videos

You Tube--iCons in Medicine views: 4,076; IDRM views: 3,776; CIR views: 66,810

http://www.youtube.com/user/IconsinMedicine

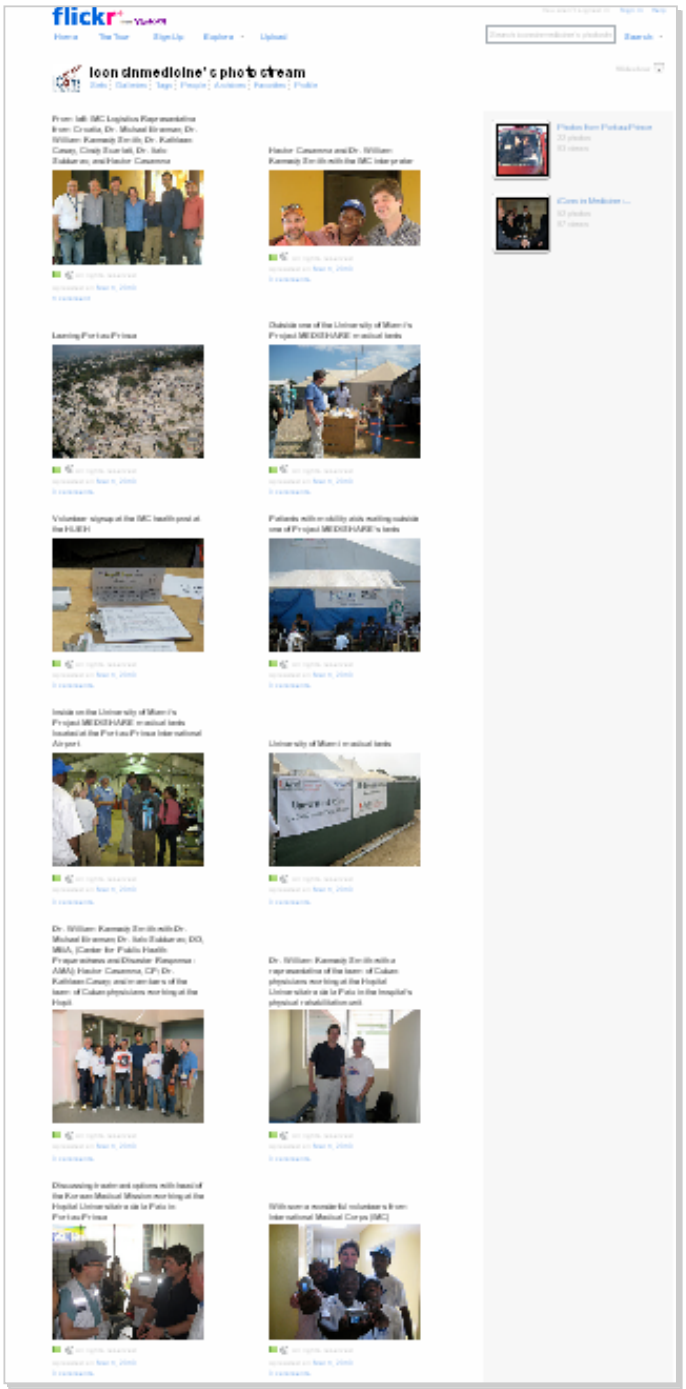


http://vodpod.com/iconsinmedicine/iconsinmedicine



I:6 Photos

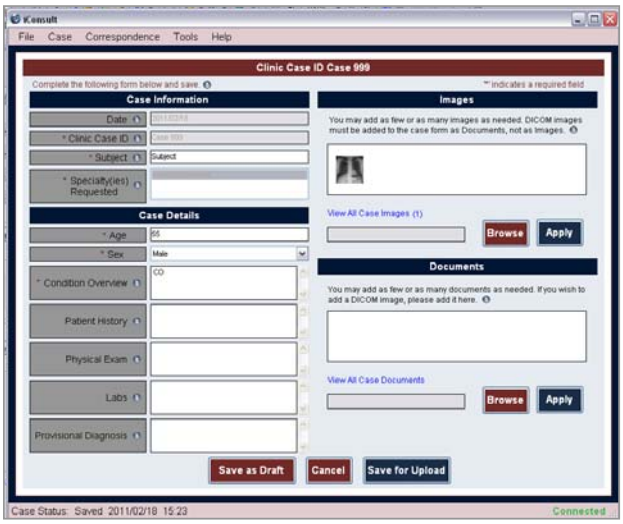
http://www.flickr.com/photos/iconsinmedicine/



Appendix J



Login Screen



Case Screen

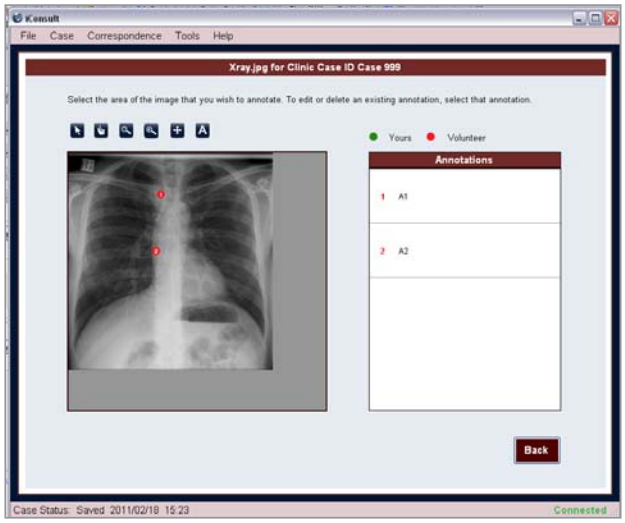
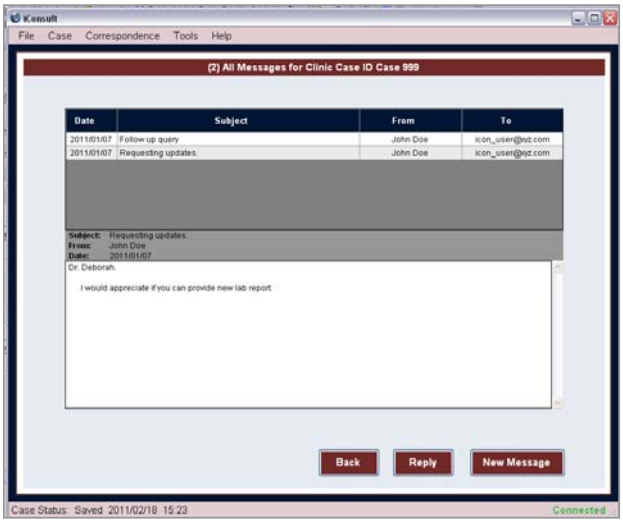


Image Annotation Screen



Messages Screen

Appendix K

Allergy and Immunology
Anesthesiology
Colon and Rectal Surgery
Dermatology
Emergency Medicine
Family Medicine
Internal Medicine :: General
Internal Medicine :: Adolescent medicine
Internal Medicine :: Cardiology
Internal Medicine :: Endocrinology
Internal Medicine :: Gastroenterology
Internal Medicine :: Geriatrics
Internal Medicine :: Hematology
Internal Medicine :: Infectious disease
Internal Medicine :: Nephrology
Internal Medicine :: Oncology
Internal Medicine :: Pulmonology
Internal Medicine :: Rheumatology
Medical Genetics
Neurological Surgery
Nuclear Medicine
Obstetrics and Gynecology
Opthamology
Orthopaedic Surgery
Otolaryngology
Pathology
Pediatrics
Physical Medicine and Rehabilitation
Plastic Surgery
Preventative Medicine
Psychiatry and Neurology
Radiology
Surgery
Thoracic Surgery
Urology

Appendix L

Slide 1



A Volunteer Driven, Next Generation, Knowledge Network:

Toward a Paradigm Shift in Global Telehealth and Humanitarian Medicine

William Kennedy Smith, MD

Slide 2

Recently, many leading medical centers have incorporated telemedicine into sponsored programs to reach out and provide services to underserved areas.

A few examples of such initiatives using telemedicine across borders include:

Slide 3

U.S. – Cambodia

- **Focus:** Remote lab services, primary care
- **Primary institutional involvement:** Partners Telemedicine Program (Massachusetts General and Brigham and Women's Hospitals), Boston, MA; Phnom Penh and 2 villages in Cambodia

U.S. – Uganda

- **Focus:** pediatric cardiology and HIV, health. professional training, technical support and public health
- **Primary institutional involvement:** Children's National Medical Center, Washington, DC; Mulago Hospital, Uganda; International Hospital

Slide 4

Alaska - Russia

Arctic Council, Telemedicine Cooperative Project

- **Focus:** Technical training, specialty medical services, distance learning
- **Primary institutional involvement:** Sakha Republic medical institutions; Alaska Federal Health Care Access Network participating

U.S. – Russia

- **Focus:** Primary and specialty care
- **Primary institutional involvement:** Medical College of Georgia, Augusta, GA; Sarov Medical Center, Russia institutions

Slide 5

Norway – India

- **Focus:** remote consultation, diagnosis
- **Primary institutional involvement:** Rikshospitalet University Hospital, Oslo, Norway; Methodist primary health care center, Mursan, IndiaSakha Republic medical institutions; Alaska Federal Health Care Access Network participating

U.S. – Ethiopia

- **Focus:** Professional medical training, HIV/AID, Malaria
- **Primary institutional involvement:** Johns Hopkins International, Baltimore, MD; Addis Ababa University, Ethiopia

Slide 6

The Practice of Telemedicine

- Two-way communication
- Pretty Amazing New Stuff (PANS)
- High Cost of Entry
- Project Oriented
- Limited Access
- Professional Driven-Top Down
- Project Specific Outcomes
- Minimal Knowledge Capture

Slide 7



In *Powershift*, Toffler (1990) argues that success will accrue to the individual, group, community, society or nation that has the best access to information and the ability to process it.

Slide 8

Two Generations of Knowledge Management Strategies (Couros, 2003)

1. Technical tools and systems (Hovland, 2003) data retrieval, dissemination and knowledge sharing (McElroy, 2000).
2. Organizational processes and knowledge creation, *"shifting from management based on compliance to management based on self-control and self-organization"* (Hovland, 2003).

Slide 9

Communities of Practice

Second generation Knowledge Management strategies have focused on the development of Communities of Practice. Defined as *"groups whose members regularly engage in sharing and learning based on common interests"* (Lesser and Storck, 2001).

Slide 10

The Mission

To create a volunteer community of knowledgeable and committed health professionals, enabled by appropriate information and communication technology, that can build bridges and forge connections across geographic, social, cultural and ideological boundaries in order to make high quality medical knowledge available wherever medicine is practiced.

Slide 11

The Goal

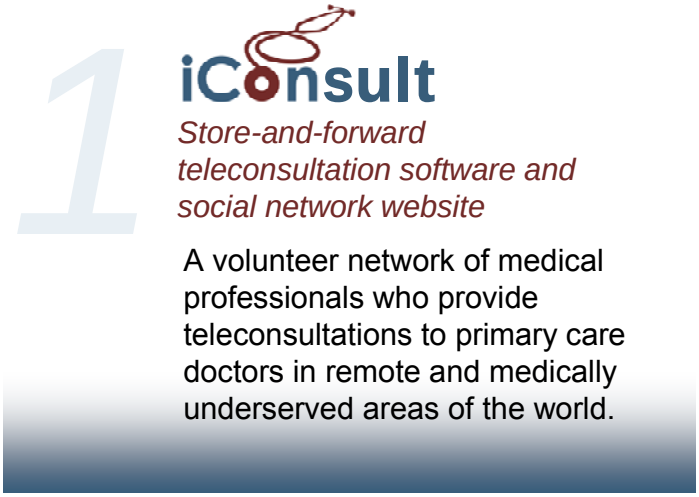
To address health disparities by increasing the quality and availability of health services in remote and medically underserved areas worldwide.

Slide 12

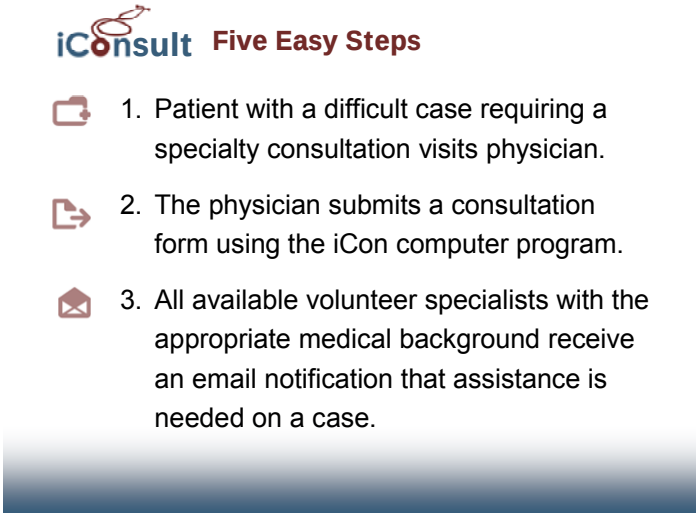
The iCon program is built around four program elements:

1. iConsult
2. iCon Resource Center
3. iConnect
4. iConferences

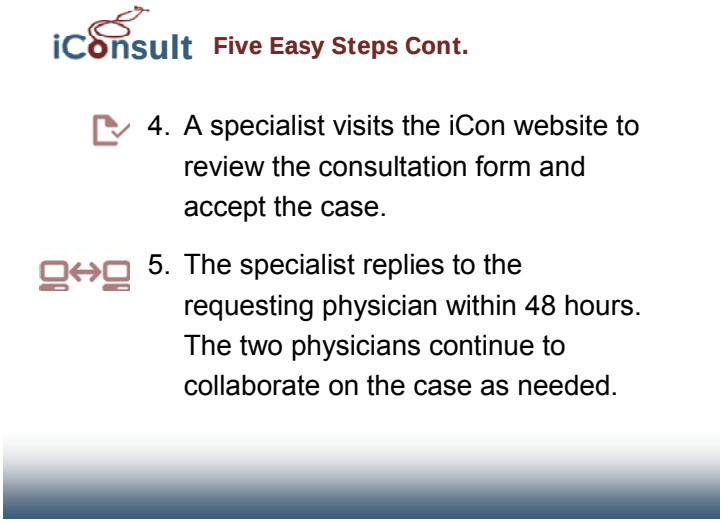
Slide 13



Slide 14



Slide 15



Slide 16

iConsult Website

The iConsult website allows both "requestors" and consultants to post profiles of themselves, their organizations and their practice areas online.

A global registry of members Members with relevant knowledge or capability that interact in a vibrant "community of practice" (CoP)

Slide 17

iConsult Program

Volunteer Chapters

Volunteer consultants join chapters. It takes three physicians to form a chapter (Chair, Medical Director and Secretary). Chapters must accredit their members and each member must agree to provide a minimum of three consults per year.

Slide 18

iConsult Program cont.

Member Organizations

Healthcare organization that work in medically underserved areas may apply to receive assistance through the iCon Network. They must be non-profits and have a mission and activities that are compatible with the iCon Network. They enroll their staff.

Slide 19

2

iCon Resource Center

•Developed with the American Telemedicine Association.
•Access to tools, resources and people: discussion forums, chats and document sharing
•Members can collaborate on ongoing projects or start their own. Examples may include:

Slide 20

iCon Resource Center cont.

Medical Service Database
A searchable database of organizations and corporations with a commitment to medical volunteer service.

Open Content Curriculum Project
A Core Tele-health Curriculum developed under the leadership of the American Telemedicine Association (ATA).

Slide 21

iCon Resource Center cont.

Telemedicine Best Practices Repository
A space, developed in collaboration with the ATA, for sharing evidence and information about telemedicine in remote and underserved areas.

Technical Solutions Center
Featuring proven, evidence-based technical solutions that encourage innovation, cross fertilization and boundary crossing.

Slide 22

iCon Resource Center cont.

RADAR International Community

RADAR (Research on Adverse Drug events And Reports) an independent drug safety project, lead by Charles Bennett MD, Ph.D which proactively seeks out data on suspected adverse events, and disseminate alerts to guide physician response.

Marketplace Exchange

Where volunteers can locate low or no cost donated materials, resources, medicines, computers, etc. Supported by businesses throughout the world.

Slide 23

3

iConnect

Medical Missions

iConnect is the next step. People-to-People medical missions facilitated by telemedicine, teleconsultation and Internet-based information exchange.

Slide 24

4

iConferences

Annual Conferences

Focus on the use of “appropriate” information and communication technologies to address health disparities in remote and medically underserved areas.

Exchange of information and best practices on the effective use of technology in pursuit of the iCon mission.

Slide 25

The iCon Paradigm Shift- From/To

- Two Way Communications/ Networked Interactions
- Pretty Amazing New Stuff (PANS)/
- Commercial Off-The-Shelf (COTS)
- High Cost of Entry/Reduced Cost of Entry

Slide 26

The iCon Paradigm Shift - From/To

- Project Oriented/Solutions Oriented
- Minimal Knowledge Capture/Captured Best Practices
- Professionally Driven (Top Down)/ Professional/Amateur (Pro Am) Bottom Up

Slide 27

Expected Outcomes for Volunteers

- Instill new perspectives of global citizenship, medical diplomacy, cross-cultural sensitivity.
- Increase the impact of volunteerism through collaboration.
- Deliver better health services at a lower cost.

Slide 28

Expected Outcomes for Volunteers *cont.*

- Build capacity and expand the pool of new and returning health care volunteers.
- Encourage volunteers to become a “social network,” and create a global community of practice within and across sectors.

Slide 29

Expected Societal Benefits

- Increase the awareness of the role and value of global health service.
- Heighten cultural understanding and religious tolerance.
- Empower a "global medical workforce" with new resources to address complex problems with targeted efficiency.

Slide 30

Expected Societal Benefits *cont.*

- Utilize new technologies that will help bridge the “digital divide” in underserved areas.
- Advance innovation in the field of telemedicine.
- Foster a deeper understanding of health disparities, while nurturing insights that can lead to political, social and economic change.

Slide 31

Expected Societal Benefits *cont.*

- Enhance the standing of the United States of America through Medical Diplomacy.
- Improve the quality and availability of health services in remote and medically underserved areas.

Slide 32

"If access to health care is considered a human right, who is considered human enough to have that right?"

--- Dr. Paul Farmer

Slide 33

Become one of the iCons in Medicine

"Three for the World"

Sign up today to participate.
Please visit **www.iconsinmed.org**

Appendix M

Telemedicine Support for the Iraqi Health Sector:
Building Bridges Through Humanitarian Relief

Friday May 23 • 8am – 5:00 pm • Chicago Illinois

Program Description/ Roles and Responsibilities

The Goal

The goal of the meeting is to prepare for the Iraqi Minister of Health, and the international community, a viable set of options as to how telemedicine, communications technologies and an international workforce might best be used to strengthen the health sector in Iraq. These options will be developed in parallel workshops focusing on developing recommendations in 5 key areas. Each workshop will be lead by a Rapporteur who will compile the participants' ideas and conclusions into a final report for distribution.

Tracks

Each workshop will focus on one key area:

1. Public health
2. Healthcare Delivery
3. Refugee Assistance
4. Medical education and training
5. War Wounded

Rapporteur

There will be one Rapporteur per workshop. This person will facilitate the deliberations of the workshop, produce a document based on the conclusions determined and play a role in the reporting of these findings to Congress, the media and others of interest. The Rapporteur will identify the participants of the workshop in which he/she leads.

Secretary

There will be one Secretary per workshop. He/she will be responsible for the scribing of discussions during the session and then coordinating with the Rapporteur to produce a final summation document.

Scope of Work

Each session will address the following strategies in regards to the track and potential approaches for use within the ICT infrastructure in Iraq.

1. Store and forward technology
2. High-bandwidth synchronous connectivity
3. Distributed learning
4. Cellular technology
5. Web based approaches

Workshop Methodology

Each workshop will encompass activities including: identifying strategies, prioritizing strategies, developing strategies. The flow of the workshop will be:

1. Identifying Strategies: Using flip charts, the group will collectively document any and all strategies relevant to each area of focus.
2. Prioritizing Strategies: After all strategies have been documented, groups will prioritize strategies by having each participant place a sticker next to the five strategies they feel have the best chance of success. Each participant will have only five stickers and the strategies will be rank ordered by the number of stickers they accumulate during the course of this exercise.
3. Developing Strategies: The group will further develop each of the selected strategies focusing on best practices, appropriate use of resources and effective partnership.

Documentation

The Rapporteur and Secretary will compile the output to present during the wrap-up at the closing plenary session. A final report will be prepared for distribution.

Telemedicine Support for the Iraq Health Sector: Building Bridges Through Humanitarian Relief

A one-day exchange of ideas as to how telemedicine might be used to strengthen the health sector in Iraq

Friday May 23, 2008 • 8:00 am –5:00 pm
Northwestern University • Chicago, Illinois

8:00 am -8:30 am	**Registration/breakfast** *(Atrium, Robert H. Lurie Medical Research Center 303 E. Superior)* All participants of the workshops will need to check in at registration to receive their packet of information for the day.
8:30 am- 10:35 am *The plenary will begin promptly at 8:30 am*	**Plenary Session: Welcome/Opening remarks** *(Baldwin Auditorium, Robert H. Lurie Medical Research Center)* Key Note Speaker **The Honorable Salih Mahdi Motlab Al-Hasnawi, MD** • Current Overview the Iraqi Health Sector Speakers **Dan Sudnick, PhD** Chief Financial Officer Tragedy Assistance Program for Survivors, Inc. • Iraq's Current Telecommunications Infrastructure **Colonel Ron Poropatich**, Deputy Director, Telemedicine Advanced Technology Research Center • Store and Forward Tele-Consultation, A Practical Approach to Telemedicine: The U.S. Army Experience **The National Arab American Medical Association and the Center for International Rehabilitation** • iCons in Medicine- A Volunteer-Driven, Next Generation Knowledge Network for Iraq and Beyond
10:35 am - 10:45 am	Working groups gather in the atrium according to designated tracks.
10:45 am	Secretaries lead their respective group to the appropriate meeting room (four groups are across the street from the plenary session in the same building, one of the groups will be in another building).
11:00 am- 3:30 pm (Working lunch 12:30 pm- 1:00 pm)	**Working Groups of Experts** *(McGaw Pavilion 240 E. Huron St. and Rubloff Blg. 375 Chicago Ave.)* Within each group's area of focus (public health, health care delivery, medical education and training, refugee assistance and war wounded) compile a viable set of options as to how telemedicine, communications technologies and an international workforce might best be used to strengthen the health sector in Iraq.
3:30 pm-5:00 pm	**Wrap up session** *(Williams Auditorium, McGaw Pavilion, 240 E. Huron St.)* Speakers Donald "Pat" Patierno (3:30- 3:45) • International Trust Fund Workshops Public Health (3:45-4:00) Healthcare Delivery (4:00-4:15) Medical Education and Training (4:15-4:30) Refugee Assistance (4:30-4:45) War Wounded (4:45-5:00)

Meeting Sponsors

Center for International Rehabilitation
William Kennedy Smith, MD
President
drsmith@cirnetwork.org

The Center for International Rehabilitation (CIR) is a Chicago-based, not-for-profit organization that develops research, education and advocacy programs to improve the lives of people with disabilities internationally. Founded in 1996, the CIR operates in collaboration with the renowned Rehabilitation Institute of Chicago and Northwestern University. Through innovative engineering projects, capacity building education programs, interactive online tools, and disability rights advocacy, the CIR reaches out to individuals and communities across the globe.

Chicago Medical Society
Saroja Bharati, MD
President
SarojaBharati@thic.com

Chicago Medical Society (CMS) was founded in 1850 and just celebrated its 150th anniversary. The Society cultivates the science and art of medicine, the interchange of professional experience, and the encouragement of professional zeal among its members. Membership is composed of nearly 7,000 professionals in specialties across Cook County in Chicago, Illinois. Membership is open to all medical students, residents, physicians active in practice, academicians and retired physicians.

Iraqi Medical Science Association
Riad Almudallal, MD
President
riadalmudallal@yahoo.com

The Iraqi Medical Sciences Association (IMSA) is a non-profit organization of medical doctors, dentists, pharmacists, scientists, and other health science professionals. Its broad mission is to promote scientific, cultural, and social exchanges for the betterment of its members and their communities. Founded in 1998 as an association for the worldwide diaspora of Iraqi medical alumni, IMSA has evolved into a vibrant and dynamic community of health science professionals and their families—and an organization which has consistently sought to promote harmony and unity in the context of scientific and cultural enrichment.

National Arab American Medical Association
Mouhanad Hammami, MD
Executive Director
mhammami@naama.com

National Arab American Medical Association (NAAMA) is a nonprofit, nonpolitical, educational and charitable organization of medical professionals of Arab descent. NAAMA was incorporated in California in 1975 and became a national organization in 1980. Twenty-nine chapters of NAAMA have been established in the United States and Canada. The objectives of NAAMA encompass a wide range of professional, educational, charitable, humanitarian and cultural activities.

Organizing Committee

Honorary Chairman
Senator Richard J. Durbin

Honorary Chairman
Congressman Raymond H. LaHood

Dale C. Alverson, MD
Professor of Pediatrics and Regents' Professor
Medical Director, Center for Telehealth and Cybermedicine Research

Riad Almudallal, MD
President
Iraqi Medical Sciences Association

Richard S. Bakalar, MD
Chief Medical Officer
IBM Global Healthcare. Provider Segment

Charles Bennett, MD
Professor, Division of Hematology / Oncology
Northwestern University

Saroja Bharati, MD
President
Chicago Medical Society

Elizabeth Calhoun, PhD
Assoc. Professor, Dept. of Health Policy and Administration
University of Illinois at Chicago School of Public Health

Conrad Clyburn, MS
Assoc. Director for Emerging Technology
ISIS Center, Georgetown University

Charles R. Doarn, MBA
Executive Director
University of Cincinnati's Center for Surgical Innovation

Shakir Jawad, MD
Assistant Professor, MEM
Uniformed Services University of the Health Sciences., F. Edward Hebert School of Medicine

Joseph C. Kvedar, MD
Director, Center for Connected Health
Partners HealthCare System, Inc.
Associate Professor of Dermatology
Harvard Medical School

Rifat Latifi, MD, FACS
Prof. of Clinical Surgery
The University of Arizona

Lynn Lawry, MD, MSPH, MSc
Instructor in Medicine , Harvard Medical School and
Faculty member, Brigham and Women's Hospital, Division of Women's Health

Mouhanad Hammami, MD
Executive Director
National Arab American Medical Association

Ronald Merrell, MD, FACS
Professor of surgery
Dir. of the Medical Informatics and Technology Applications Consortium
Virginia Commonwealth University

Arnauld Nicogossian, MD
Head of the Office of International Medical Policy at the School of Public Policy
George Mason University

Laurence Ronan, MD
Senior Adviser
Center For the Integration of Medicine and Innovative Technology (CIMIT)
Harvard Medical School

Jay Sanders, MD
President and CEO
The Global Telemedicine Group

William Kennedy Smith, MD
President
Center for International Rehabilitation

Max E. Stachura, MD
Director of the Center for Telehealth
Medical College of Georgia

Mark VanderWerf
President
AMD Telemedicine

Abdulrahman Yassin, MD
Consultant
Center for International Rehabilitation

Organizing Committee Biographies

Riad Almudallal, MD
President
Iraqi Medical Sciences Association

Dr. Almudallal is the president of the Iraqi Medical Sciences Association. He is a U.S.-based Iraqi physician with a practice specialization in Gastroenterology and Hepatology. A graduate of the Medical College of Baghdad University, he did postgraduate studies at the Glasgow Medical College, Scotland, Mount Sinai Medical Center and St. Luke's Hospital in Cleveland, Ohio, and completed a Fellowship in Gastroenterology at Case Western Reserve University in Cleveland. Dr. Almudallal is certified by the American Board of Gastroenterology and the American Board of Internal Medicine. He is a member of numerous professional associations including the American College of Gastroenterology, American College of Physicians, American Medical Association and the Royal College of Pathologists. Dr. Almudallal's research activities involve issues of gastrointestinal hemorrhage and lymphomas.

Dale C. Alverson, MD
Professor of Pediatrics and Regents' Professor
Medical Director, Center for Telehealth and Cybermedicine Research

Dr. Alverson is a Professor of Pediatrics and Regents' Professor on faculty at the University of New Mexico and the Medical Director of the Center for Telehealth and Cybermedicine Research. In that role, he has been involved in the planning, implementation, research and evaluation of Telemedicine systems for New Mexico primarily serving its rural communities. He is a founder of the New Mexico Telehealth Alliance and has been appointed by the Governor as a commissioner on the New Mexico Telehealth Commission. He is on the Boards of the American Telemedicine Association (ATA) and the Center for Telehealth and e-Health Law (CTeL). He is also a member of the Four Corners Telehealth Consortium, and has participated in international Telehealth projects, particularly with Latin America.

Saroja Bharati, MD
President
Chicago Medical Society

Dr. Bharati is the president of the Chicago Medical Society and the director of the Maurice Lev Congenital Heart and Conduction System Center, part of the Heart Institute for Children, Advocate Hope Children's Hospital. She is also professor of pathology at Rush University Medical Center, clinical professor of pathology at Rosalind Franklin University, and visiting professor of pathology at the University of Illinois College of

Medicine. She is the only cardiac pathologist to teach at all six medical schools in the Chicago area. Dr. Bharati has published extensively, including a recent two-volume book titled Pathology of Congenital Heart Disease: A Personal Experience with More than 6,300 Congenitally Malformed Hearts. In 1999, *Today's Chicago Woman* magazine honored Dr. Bharati as one of 100 women making a difference in Chicago.

Richard Bakalar, MD
Chief Medical Officer
IBM Global Healthcare. Provider Segment

Dr. Bakalar, who previously served as President of the ATA, currently serves as the Chief Medical Officer on IBM's Global Healthcare and Life Sciences Industry team. He is the senior clinical advisor to the U.S. and Canadian Business Consulting Services Healthcare teams which have hosted informational workshops and health care seminars. Dr. Bakalar joined IBM Healthcare and Life Sciences team after 26 years service in the U.S. Navy Medical Corps. He has extensive experience in clinical medicine, diagnostic imaging, military medical flight operations, and applied information technology. He is board certified in both Internal and Nuclear Medicine. Dr. Bakalar served as the Executive Assistant to Navy Surgeon General for Global Telemedicine initiatives.

Charles Bennett, MD
Professor, Division of Hematology / Oncology
Northwestern University

Dr. Bennett is Associate Director of the Midwest Center for Health Services & Policy Research at the Jesse Brown VA Medical Center-Lakeside CBOC and Co-Director for the Cancer Control Program of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University, as well as Professor of Medicine at the Northwestern University Feinberg School of Medicine, Division of Hematology/Oncology. He has board certification in internal medicine with a medical oncology subspecialty. Dr. Bennett is an active member on practice and outcomes assessment committees for the American Society of Hematology, the Department of Veterans Affairs (VA), the National Cancer Center Network, the American Society of Clinical Oncology, and the Eastern Cooperative Oncology Group. He is also an editor for the Journal of Acquired Immunodeficiency Syndrome and a reviewer for several hematology and oncology journals.

Elizabeth Calhoun, PhD
Assoc. Professor, Dept. of Health Policy and Administration
University of Illinois at Chicago School of Public Health

Dr. Calhoun is an associate professor and senior research scientist in the division of health policy and administration in the school of public health at the University of Illinois

at Chicago. She is an experienced health services researcher with expertise in health disparities and underserved populations. Additional areas of expertise include economic and organizational analyses as well as program evaluation.

Conrad Clyburn, MS
Associate. Director for Emerging Technology
ISIS Center, Georgetown University

Mr. Clyburn is the Associate Director for Emerging Technology, ISIS Center at Georgetown University. From 1997 to 2005, he served as Director of Program Integration and Planning for the U.S. Army Medical Research and Material Command, Telemedicine and Advanced Technology Research Center (TATRC) in Fort Detrick, Maryland. In that capacity, Mr. Clyburn was responsible for life cycle management of more than 500 medical research and development programs. His responsibilities included execution of academic, government and industry programs in telemedicine, medical informatics, advanced surgical technology and imaging, bioinformatics, medical modeling and simulation, as well as biosurveillance, robotics, biomaterials, tissue engineering and nanotechnology. During his tenure, TATRC-funded programs spearheaded the development of numerous medical technologies that are now being used by U.S. troops and other federal agencies.

Charles R. Doarn, MBA
Executive Director
University of Cincinnati's Center for Surgical Innovation

Mr. Doarn serves as the Executive Director of the University of Cincinnati's Center for Surgical Innovation, where he is also a Research Associate Professor of Surgery and Biomedical Engineering. Prior to joining the faculty in Cincinnati, Mr. Doarn served as the Executive Director and co-principal investigator for NASA's Research Partnership Center for Medical Informatics and Technology Applications (MITAC) at Virginia Commonwealth University, where he authorized NASA's strategic plan for Telemedicine. Mr. Doarn served on the Board of Directors for the ATA as well as Secretary, Treasurer, and chair of the International Special Interest Group. Mr. Doarn also serves as an Editor-in Chief of the Telemedicine and E-Health Journal.

Mouhanad Hammami, MD
Executive Director
National Arab American Medical Association

Dr. Hammami is the president of the Michigan chapter of the National Arab American Medical Association (NAAMA). He is a graduate of Aleppo University School of Medicine and is currently a faculty member of Wayne State University School of Medicine in the Department of Pediatrics. He is a Professor of Microbiology at Oakland

Community College as well as a Research Associate at the Detroit Medical Center researching nutrition and growth in newborns. Dr. Hammami has been involved in different clinical studies ranging from infant formula evaluation to new childhood vaccination trials. He was involved in the NIH funded PACTG clinical trial on "body composition in infants born to HIV-positive mothers" between 1997 and 2003 as well as many other studies, with the most recent conducted in 2004 in collaboration with ACCESS Health and Research Center which studied the growth of Palestinian children living in refugee camps in Lebanon. Dr. Hammami is a member of a number of several professional and honor societies and has had many publications in different medical journals.

Shakir Jawad, MD
Assistant Professor, MEM
Uniformed Services University of the Health Sciences.
F. Edward Hebert School of Medicine

Dr. Jawad is currently assigned as an Assistant Professor in the Department of Military and Emergency Medicine at the Uniformed Services University of the Health Sciences. He was a Brigadier General in the Iraqi Armed Forces and oversaw CME/ CPD programs and innovative development of an e-library providing the most current information possible under embargo conditions. After the fall of Saddam's regime he joined the Iraqi Ministry of Health in support of the Coalition Provisional Authority Health Team helping to re-establish the Iraqi health care system. In May 2003 he was appointed as the Director General of the Department of Military Medical Affairs at the Iraqi Ministry of Health (The Iraqi Surgeon General) then promoted to the Director General of Medical Operations (Under Secretary of Health). In 2004 he modernized the rudimentary operations center at the Ministry of Health providing video conferencing and telemedicine capabilities to 13 teaching hospitals in Baghdad and to 6 other medical sites. He has extensive knowledge and clinical expertise in bone lengthening procedures and operative treatment of wide bone gaps. His current areas of interest and endeavor include international health, post-conflict reconstruction of healthcare systems, government health policy, and health education.

Joseph C. Kvedar, MD
Director, Center for Connected Health
Partners HealthCare System, Inc.
Associate Professor of Dermatology
Harvard Medical School

Dr. Kvedar is Founder and Director of the Center for Connected Health, a division of Partners Healthcare that is applying communications technology and online resources to improve access and delivery of quality patient care. Dr. Kvedar is internationally recognized for his leadership in the field of connected health. He is a past President and board member of the American Telemedicine Association (ATA) and co-editor of *Home*

Telehealth: Connecting Care within the Community, the first book to report on the applications of technology to deliver quality healthcare in the home. Dr. Kvedar is also a board-certified dermatologist and Vice-Chair of Dermatology at Harvard Medical School.

Rifat Latifi, MD, FACS
Professor of Clinical Surgery
The University of Arizona

Dr. Latifi is a Professor of Clinical Surgery at the University of Arizona, Vice Chairman of the Department of Surgery for International Relationship, and Director of Southern Arizona Telemedicine and Telepresence Program (SATT) at the University Medical Center, Tucson, Arizona. In addition to his role as director, he developed the SATT Program, which provides a live consultation link—including state-of-the-art videoconferencing, telemetry, digital X-rays and ultrasound—between the trauma doctors at UMC and rural emergency room doctors and nurses in the southern section of the state to assist in trauma care of injured and critically ill patients. He is also the Associate Director of Arizona Telemedicine Program where he leads Telesurgery and International Affairs for this program. Dr. Latifi is a graduate of Medical Faculty in Prishtina, Kosova. He has a president of International Virtual e-Hospital Foundation.

Lynn Lawry, MD, MSPH, MSc
Harvard Medical School and Brigham and
Women's Hospital, Division of Women's Health

Dr. Lawry, of Harvard Medical School, Division of Women's Health at Brigham and Women's Hospital and the Bloomberg School of Public Health, Johns Hopkins University, has devoted her career to humanitarian aid, international human rights violations and human rights training, much of it in war-torn areas in Africa, Asia and the Middle East. Dr. Lawry served with many humanitarian aid organizations including Physicians for Human Rights, in Kosovo, Pakistan, Afghanistan, Sierra Leone, Nigeria and Iraq and International Medical Corps in Darfur, South East Asia, and Katrina hit areas. Her focus has been conducting and using evidence-based research to advocate for changes in health and human rights inequalities. She is Director of Research and Education at the Center for Disaster and Humanitarian Assistance Medicine at the Uniformed Services University of the Health Sciences. She focuses on rights-based programming, or making sure that programming meets international standards of care and civil-military coordination.

Ronald Merrell, MD, FACS
Professor of surgery
Director of the Medical Informatics and Technology Applications Consortium
Virginia Commonwealth University

Dr Merrell is professor of surgery and director of the Medical Informatics and Technology Applications Consortium at Virginia Commonwealth University. He is an editor-in chief of *Telemedicine and e-Health* and author of some 300 publications in the field of medicine and technology. Dr Merrell trained in surgery and biological chemistry at Washington University in St Louis. Dr Merrell is an endocrine surgeon and has held the chair in surgery at Yale and at Virginia Commonwealth University. Dr Merrell has a long history as advisor and investigator for NASA and the Army. His research work has emphasized management of medical events at a distance including extreme environments.

Arnauld Nicogossian, MD
Head of the Office of International Medical Policy at the School of Public Policy
George Mason University

Dr. Nicogossian heads the Office of International Medical Policy at the School of Public Policy at George Mason University in Fairfax, Va. He has been Senior Advisor to the NASA Administrator for agency-wide issues related to health care provisions and aerospace medicine and has held increasingly responsible positions in NASA research and development areas for more than 30 years. He was named Associate Administrator for Life and Microgravity Sciences and Applications in May 1996, and has contributed significantly to the NASA mission of ensuring crew health in human exploration missions. He served as the lead physician for NASA's first international human space flight mission, the Apollo-Soyuz Test Project.

Laurence Ronan, MD
Senior Adviser
Center For the Integration of Medicine and Innovative Technology (CIMIT)
Harvard Medical School

Dr. Ronan is a staff physician at Massachusetts General Hospital, and presently serves as the MGH Director of Primary Care Sports Medicine and Director of Team 4 Hospitalist Service. Dr. Ronan is also the Director of the MGH Thomas S. Durant Fellowship in Refugee Medicine and is on the Executive Committee of the Harvard Humanitarian Initiative. He has served in a number of disaster relief efforts including the Indonesian tsunami ('04) and Katrina ('05). He directs Helping Hands, a relief effort for Iraqi children wounded in the war and who require medical care in the United States. Dr. Ronan works with the Medical Alliance for Iraq, a physician organization dedicated to supporting Iraqi physicians in the reconstruction. He is involved in a number of

international projects that utilize telemedicine and serves as Senior Advisor to Partners Center for Medically Innovative Technology (CIMIT) and the MGH Global Health Center.

Jay Sanders, MD
President and CEO
The Global Telemedicine Group

Dr. Sanders is President and CEO of The Global Telemedicine Group, Professor of Medicine at Johns Hopkins University School of Medicine (Adjunct), and a founding board member of the American Telemedicine Association—where he serves as President Emeritus. After Dr. Sanders earned his medical degree from Harvard Medical School Magna Cum Laude, his professional career has involved teaching, patient care and health care research, along with more than 30 years experience in the field of telemedicine. He has served as a medical consultant to NASA, the U.S. Army and the World Health Organization, and during the Clinton Administration he directed the U.S. telemedicine initiatives to the G-8 nations.

William Kennedy Smith, MD
President
Center for International Rehabilitation

Dr. Smith is President of the Center of International Rehabilitation (CIR) and founder of Physicians Against Land Mines. He is a board-certified physiatrist, trained prosthetist and Principal Investigator on the CIR's International Disability Educational Alliance grant from the U.S. Department of Defense. Dr. Smith serves as adjunct clinical instructor at Northwestern University Medical School. A past recipient of the Scholl Recognition Award for Rehabilitation Research, he is a past member of the United States Council on International Disabilities and a past Chair of the working group on post conflict development and disabilities for the National Council on Disabilities. His presentations on the health consequences of landmines and international rehabilitation issues have been featured at numerous international conferences, including those of the American Medical Association, Rotary International, and the United Nations Association of the United States of America. A graduate of Duke University, Dr. Smith completed medical school at Georgetown University and residency at Northwestern University and the Rehabilitation Institute of Chicago.

Max E. Stachura, MD
Director of the Center for Telehealth
Medical College of Georgia

Dr. Stachura was Endocrinology Section Chief at the Medical College of Georgia, Augusta, from 1981 until he became Director of the Center for Telehealth and Georgia

Research Alliance Eminent Scholar in Telemedicine in 1996. He continues his endocrinology practice with a sub-specialty focus in neuroendocrinology. Under his direction the Georgia Statewide Telemedicine Program grew to deliver more than 2,000 specialty consultations per year. That statewide program has now been subsumed under the Georgia Technology Authority and WellPoint, Inc., allowing the Center and Dr. Stachura to focus on telehealth research, services development, and consultation activities. In 2000, he was appointed to the Board of Directors of the Alliance for Public Technology and served two terms as its president in 2005 and 2006.

Mark VanderWerf
President
AMD Telemedicine

Mr. VanderWerf founded AMD Telemedicine, which has over 5,000 installations in over 275 telemedicine programs in 68 countries. He joined American Medical Development as a Vice President in 1991 where he was instrumental in changing the Company's focus from traditional medical products to telemedicine. In 1994 he became the President and changed the name to AMD Telemedicine. Prior to AMD, Mr.VanderWerf was a New Ventures Manager for Digital Equipment Corporation, also serving as an internal consultant and an international programs manager. Mr.VanderWerf is the 2006 recipient of the ATA Industry Council Leadership Award and the 2003 recipient of the New England Business and Technology Leadership award as among the top 10 technology executives in the region. He is a member of the Board of Directors of the American Telemedicine Association and a founding Board of Directors member of the International Society for Telemedicine and eHealth.

Abdulrahman Yassin, MD
Consultant
Center for International Rehabilitation

Dr. Yassin works as a consultant to the Center for International Rehabilitation (CIR) serving as a liaison for the Middle East and in assisting the CIR with field projects in the region. Dr. Yassin's long work experience includes: Director of Handicapped Rehabilitation Center in Baghdad, Director of Rehabilitation Centers Department in Handicapped Welfare Council, and roles in the Department of Rehabilitation and Prevention of Disability in the Ministry of Health. He has also been a health care specialist in several medical and rehabilitation institutions and a medical consultant for various projects relating to managing disability projects. Dr Yassin is a member of the Iraqi Medical Association as well as the Iraqi Rehabilitation and Welfare of Handicapped Society.

The Workshops

After the morning plenary (10:30 am – 11:00 am)

After the close of the morning plenary, participants of the working groups will gather in the atrium according to their designated track. Each individual group will walk together to their respective meeting rooms (four of the working groups are across the street from the plenary session in the same building, one of the groups will be in another building).

Directions for each location will be in a packet for each member of the group. The secretaries for each group will be in charge of leading their group to the proper room.

Conducting of the workshops (11:00 am – 3:30 pm)

The group will offer ideas as to how telemedicine and communications technologies (i.e. store-and-forward technology, high-bandwidth synchronous connectivity, distributed learning, cellular technology, web-based approaches, etc) can be applied to the ICT infrastructure in Iraq within the track area. Once multiple ideas have been generated, the group will prioritize these strategies to determine the top five to ten. Finally, the group will develop these top five to ten strategies into potential programs or projects by focusing on best practices, appropriate use of resources and effective partnerships.

It is hoped that the results produced by the workshops will lead to the development of a trust fund under which these programs can be implemented.

To help facilitate this effort, each workshop will have:

- A Rapporteur to facilitate the deliberations of the workshop
- A group of experts in the are of focus
- A separate conference room with flip charts
- A secretary to record the ideas
- A block of time from 11:00 am to 3:30 pm

The 4 ½ hour workshop can be broken out into three separate components: Identifying Strategies, Prioritizing Strategies and Developing Strategies. Below is a suggested schedule for the workshop:

11:00 am – 11:10 am	Introductions and instructions
11:10 am- 12:30 pm	Identifying Strategies 1. Based on experiences, the participants verbalize their thoughts regarding relevant strategies on the area of focus. 2. The Rapporteur will zone in on the ideas and encapsulate into a one sentence description. 3. The secretary will list these strategies on the flip charts. 4. As the ideas are written down, the flip chart pages will be posted.
12:30 pm- 1:00 pm (Working lunch)	Prioritizing Strategies 1. Each member of the group will be given five - ten stickers. 2. Each will place a sticker next to the five - ten strategies they feel have the best chance of success (a minimum of five, but as many as ten if really felt merited). The strategies will be ranked by the number of stickers they accumulate during the course of this exercise. 3. Each strategy will be developed further throughout the workshop.
1:00 pm- 3:30 pm (Break as needed)	Developing Strategies 1. Each of the five - ten strategies will be developed separately, one at a time. 2. The group should approach each by focusing on best practices, appropriate use of resources and effective partnerships in order to outline potential programs or projects. *Examples:* ** Provide refugees with a "smart card" that contains their health record.* ** Set up an international online training program out of Syria for degreed programs.*
3:30 pm	The plenary will reconvene in Williams Auditorium, McGaw Pavilion, where the Rapporteurs will present high level details of their group's consensus.

Workshop Participants

Public Health

Location:
Rubloff Building 375 E. Chicago
Room 981
Rapporteur:
Eric Rasmussen, MD- InSTEDD
Secretary:
Athena Samaras

Participants:

1. Fadi Bashour – National Arab American Medical Association
2. Kenneth Busch—Chicago Medical Society
3. Elizabeth Calhoun-- Dept. of Health Policy and Administration University of Illinois at Chicago School of Public Health
4. Paul Heinzelmann-- Harvard Medical School
5. Charles Bennett MD-- Northwestern University
6. Eric Noji M.D-- Consultants in Global Health Security
7. Jonathan Linkous-- American Telemedicine Association
8. Arnauld Nicogossian-- Office of International Medical Policy at the School of Public Policy at George Mason University
9. Ed Menshah-- University of Illinois at Chicago
10. Benn Greenspan-- University of Illinois at Chicago

War Wounded

Location:
McGaw Pavilion 240 E. Huron
Room 403
Rapporteur:
Tammy Duckworth- Director Veterans Affairs State of Illinois
Secretary:
Hector Casanova

Participants:

1. Mike Corcoran-- Prosthetics contractor at Walter Reed
2. Gene Conley MD—Physician with ground experience in Iraq
3. Dan Sudnick-- Tragedy Assistance Program for Survivors, Inc.
4. Mike Quigley-- Consultant
5. Bjarni O. Rafnar-- O.K. Prosthetics
6. Stan Patterson-- Orthotics and Prosthetics Associates
7. Jeff Gambel, MD--- Walter Reed
8. Hani Ssaai, MD-visiting eastern Syrian doctor

Health Care Delivery

Location:
McGaw Pavilion 240 E. Huron
Room 322
Rapporteur:
Nigel Snoad, PhD - Microsoft Humanitarian Networks
Secretaries:
Simone Boyle & Cara Tigue

Participants:

1. Rabih T. Torbay—International Medical Corp
2. Charles Doarn-- University of Cincinnati's Center for Surgical Innovation
3. Arkan Alrashid, MD –Iraqi Medical Science Association
4. Haifa Azawi, MD – National Arab American Medical Association
5. Hassan Fehmi, MD – National Arab American Medical Association
6. Kay Ghachem-- Healing the Children
7. Labib Hashimi, MD –Iraqi Medical Science Association
8. Riad Almudallal, MD –Iraqi Medical Science Association
9. Imad Almanaseer, MD –Iraqi Medical Science Association
10. Max Stachura, MD -- Center for Telehealth Medical College of Georgia
11. Mark VanderWerf -- AMD Telemedicine
12. Victoria Jacobs, MD- National Iraqi Assistance Center

Medical Education and Training

Location:
McGaw Pavilion 240 E. Huron
Room 401
Co-Rapporteurs:
Michael Brennan MD- Medical Alliance for Iraq
Gary Selnow PhD-World Internet Resources for Education and Development
Secretary:
Ha Luu

Participants:

1. Dale C. Alverson, MD --Center for Telehealth and Cybermedicine Research
2. Dr. Elmir Cickusic -- Univeristy Klinical Center (Bosnia)
3. Nabil Khoury MD -- National Arab American Medical Association
4. Dr. Nedret Mujkanovic -- Univeristy Klinical Center (Bosnia)
5. The Lord Roger Swinfen—The Swinfen Trust Foundation
6. David Balch-- Medical Missions for Children
7. Christopher Spirito-- International Operations at The MITRE Corporation
8. Hareth Raddawi --National Arab American Medical Association
9. Rifat Latifi, MD--- The University of Arizona
10. Saroja Bharati MD --Chicago Medical Society
11. Dr. Raouf Seifeldin , MD – National Arab American Medical Association

Refugee Assistance

Location:
McGaw Pavilion 240 E. Huron
Room 401

Rapporteur:
Emmanuel d'Harcourt, MD- International Rescue Committee

Secretary:
Ian Costello

Participants:

1. Taryn Gillison—Drexel University
2. Maryz Habib Meawad-- State Department
3. Donald Pat Patierno-- U.S. Advocate for the Slovenian-based International Trust Fund
4. Dr. Emir Halibegovic – Univeristy Klinical Center (Bosnia)
5. A Hadi Al Khalili, MD—Iraqi Embassy Cultural Attache
6. Mouhanad Hammami, MD – National Arab American Medical Association
7. Sayre Nyce- Department of Economic and Social Affairs (DESA) United Nations
8. Monte Achenbach- American Refugee Committee
9. Susan Fink- American Refugee Committee

Appendix N

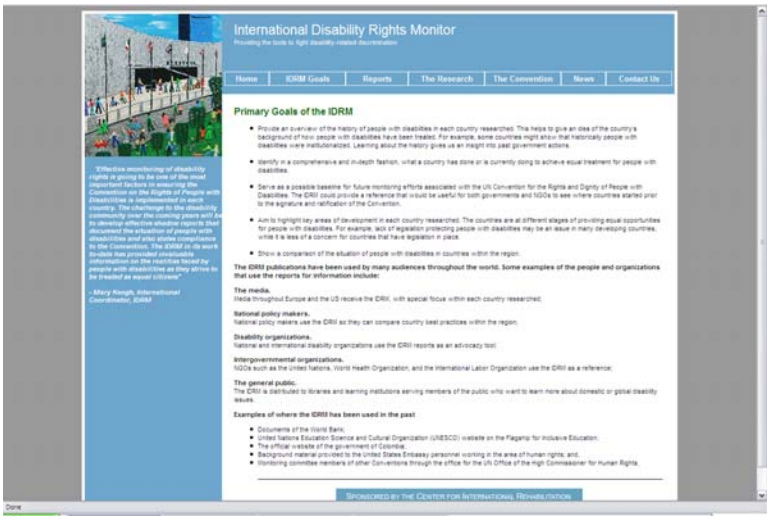
Representative screenshots of IDRMnet.org

IDRMnet.org is separated by 7 sections: Home, IDRM Goals, Reports, The Research, The Convention, News and Contact Us.

1) **Home :** The home page of IDRMnet.org tells users about the IDRM project, including the history and future goals of the IDRM work.



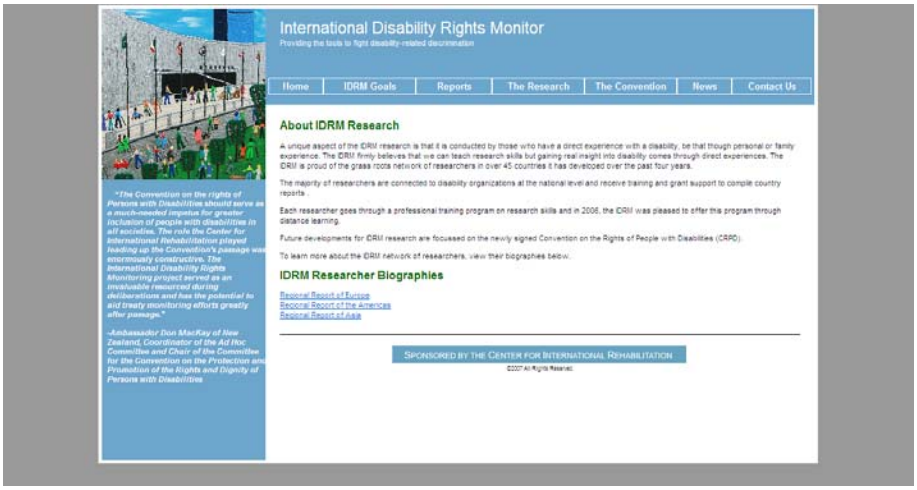
2) **IDRM Goals:** This section of the Web site outlines the "Primary Goals of the IDRM" and includes information about how the IDRM has been used as a tool to fight disability-related discrimination.



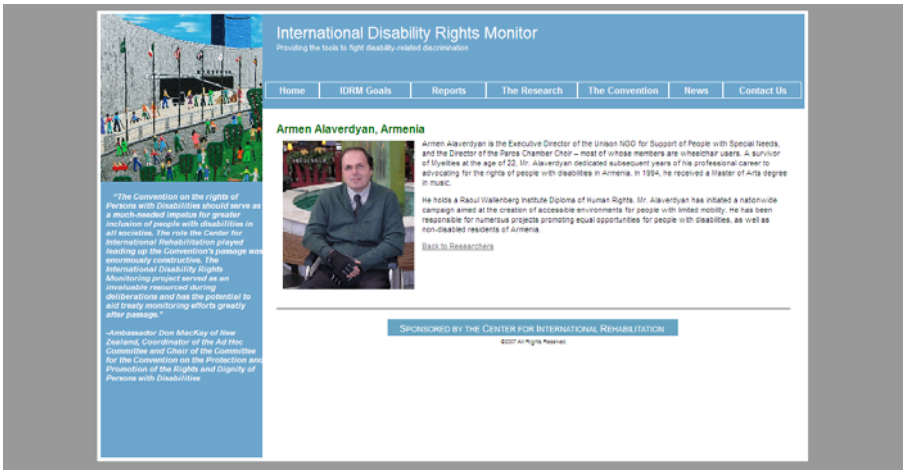
3) **Reports:** This part of the Web site allows users to actually view all four of the published IDRM reports. Each report is formatted as a PDF and can be viewed in full by clicking the corresponding cover image.



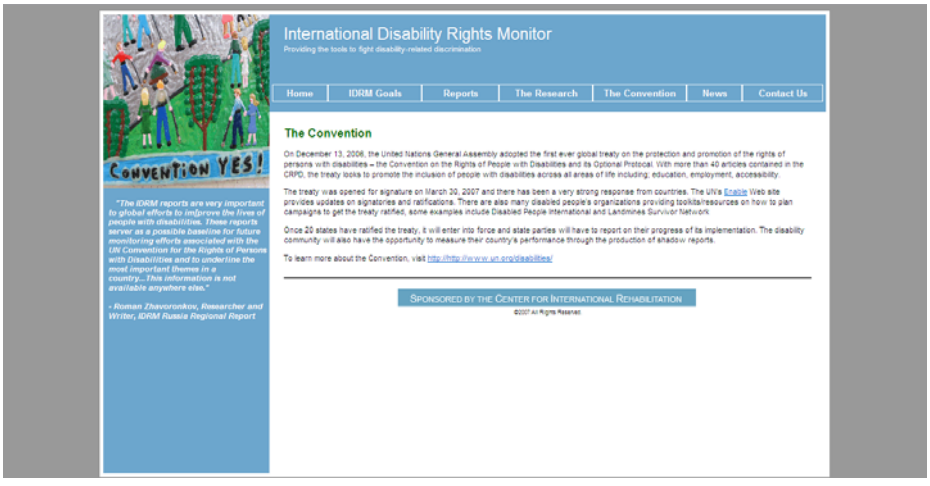
4) **The Research:** This section informs readers about how the research on the project is conducted. By selecting the "IDRM Researcher Biographies" tab, users can learn about individual authors of the report.



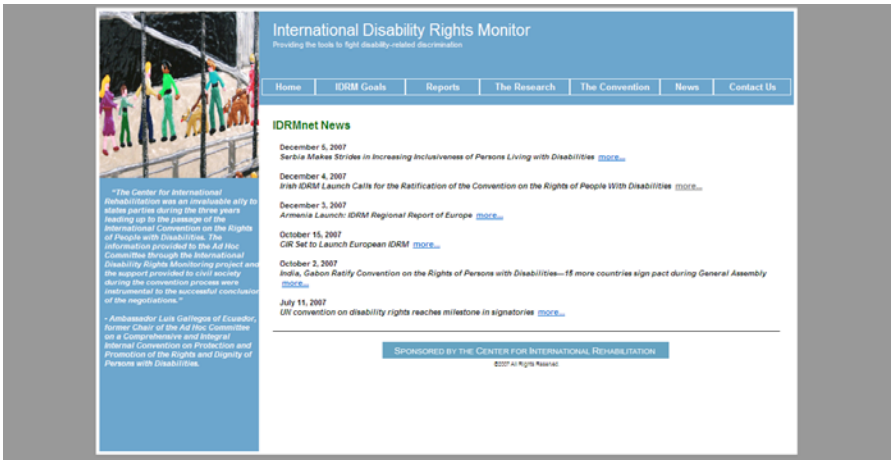
4-A "IDRM Researcher Biographies," Once this option is selected, users can reach more detailed information about individual researchers, here is an example of what you would see if you wanted to learn more about the Regional Report of Europe



5) **The Convention:** This page displays information about the Convention on the Rights of People with Disabilities. This page also includes a link for users to learn more about the Convention.



6) **News:** This section displays news items related to the IDRM



6-A: Example of a news story: The following page is an example of a news story posted on the IDRMnet.org site.



7) Contact Us: Contact information and information about the artwork used on the Web site.



Appendix O

IDRM Social Networking- Blogging, Facebook, Twitter, Photos

O:1 IDRM Blog

http://theidrm.wordpress.com/

Updated: **Bi-Monthly** **Total Lifetime Views (WordPress):** **1,807**

WordPress

http://theidrm.wordpress.com/



Blogger

http://theidrm.blogspot.com/



O:2 IDRM Facebook

Facebook profile account under William K. Smith (Same as iCon)

http://www.facebook.com/#!/iConsinMedicine?v=wall



Facebook IDRM Group

http://www.facebook.com/group.php?gid=54526648977&ref=ts



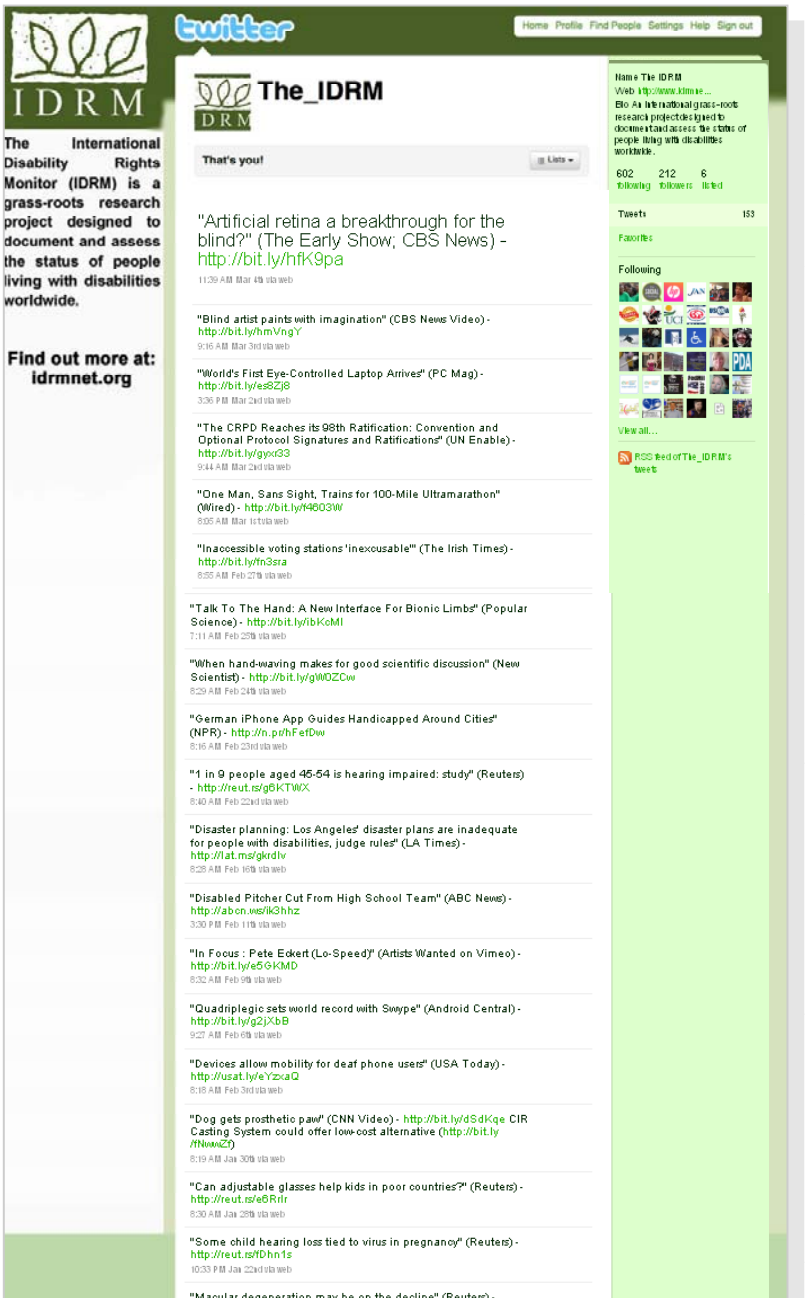
Facebook IDRM Fan Page

http://www.facebook.com/pages/The-International-Disability-Rights-Monitor-IDRM/68059862880

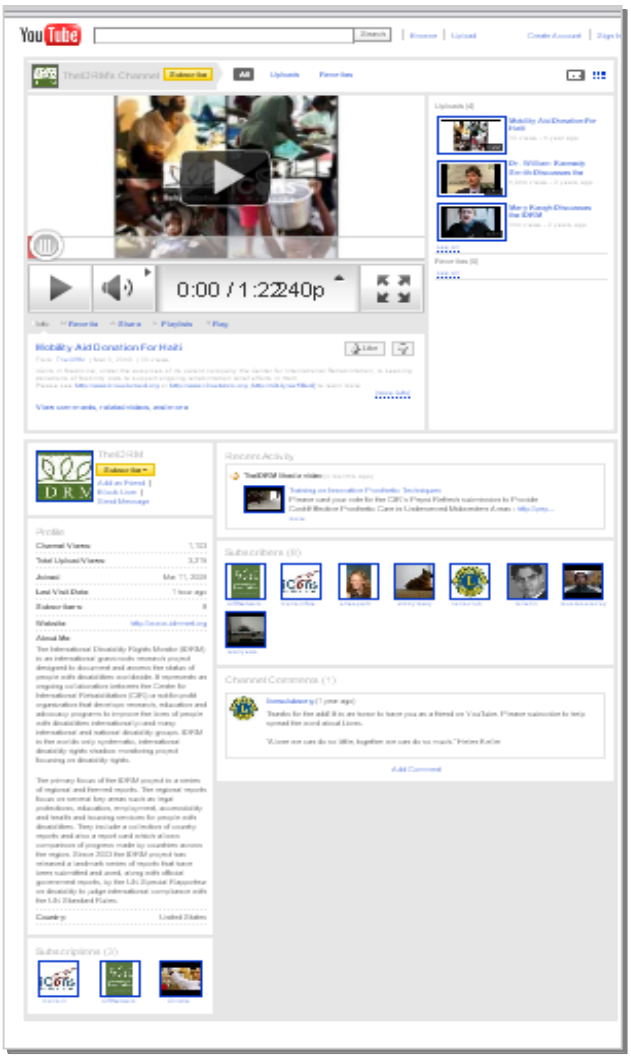


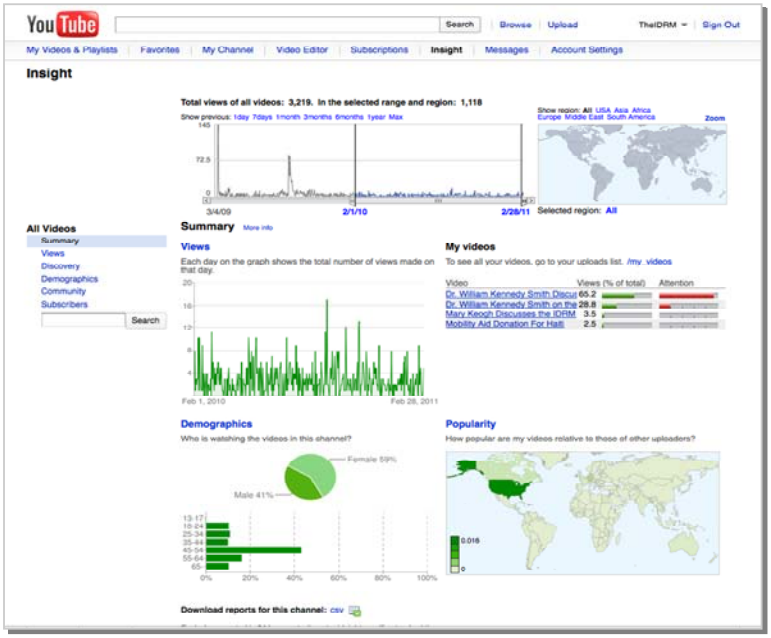
O:3 IDRM Twitter

http://twitter.com/the_IDRM
Update: at least once daily Tweets: 341 Followers: 503



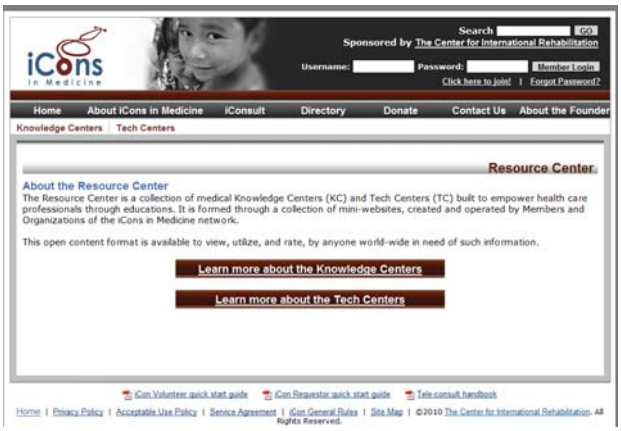
O:4 IDRM You Tube

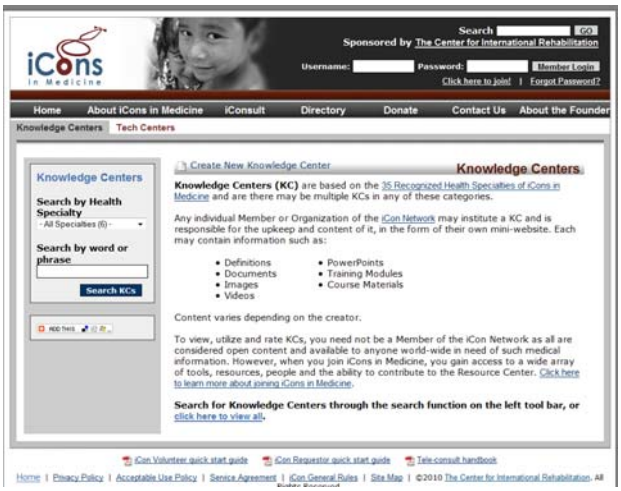


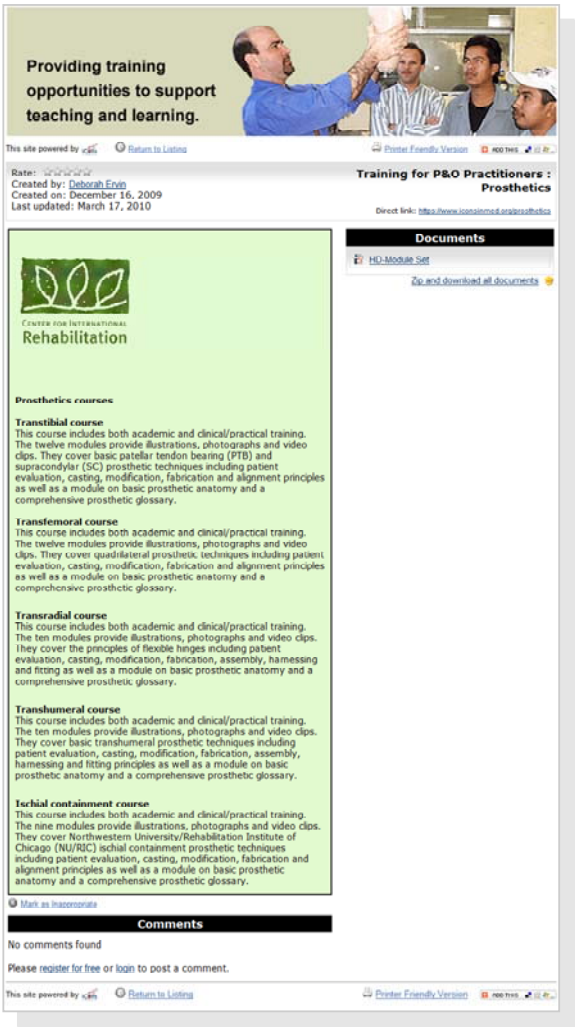


Appendix P

iCon Resource Center







Appendix Q

List of personnel (not salaries) receiving pay from the research effort.

Full-Time Staff Salaries

Aguda, Bonnie

Amalorpavam, Alexander

Armstrong, William E

Casanova, Hector R.

Coe, Hayward C

Cohen, Mary

Costello, Ian

Creed, John

Dave, Krishna

Dorsey, Katherine

Edwards, Zane

Ervin, Deborah Lynn

Frankel, Laura

Hahin, Terence

Hayes, Anne

Jackson, Kathryn

Jenkins, Andrew M.

Jones, Julie A.

Leon-Guerrero, John T.

Lewis, Elizabeth M.

Michel, Bonnie

Miller, Julie C

Prvulov, Nikola

Przygocka, Justyna F

Ramos-Torrescano, Elizabeth

Reed, Robert

Reina, Maria

Sapounas, Demetrios

Sheiry, Emily

Smith, William K. Dr.

Stanton, Mary

White, David

Part-Time/Temporary Staff

Frankel, Laura

Hahin, Terence

Jackson, Kathryn